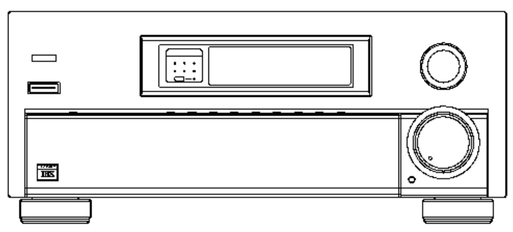
Service Manual

PIONEER®
The Art of Entertainment



ORDER NO.
RRV1814

AUDIO/VIDEO STEREO AMPLIFIER

VSA-E06

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	VSA-E06		
HY	O	AC220 – 230V	AC240V, ✻
HV	O	AC230V	AC240V, ✻

✻ : Alter the wiring of the Power-supply block at the primary winding of Power-transformer referring to the "Line Voltage Selection" described in Service Manual.

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

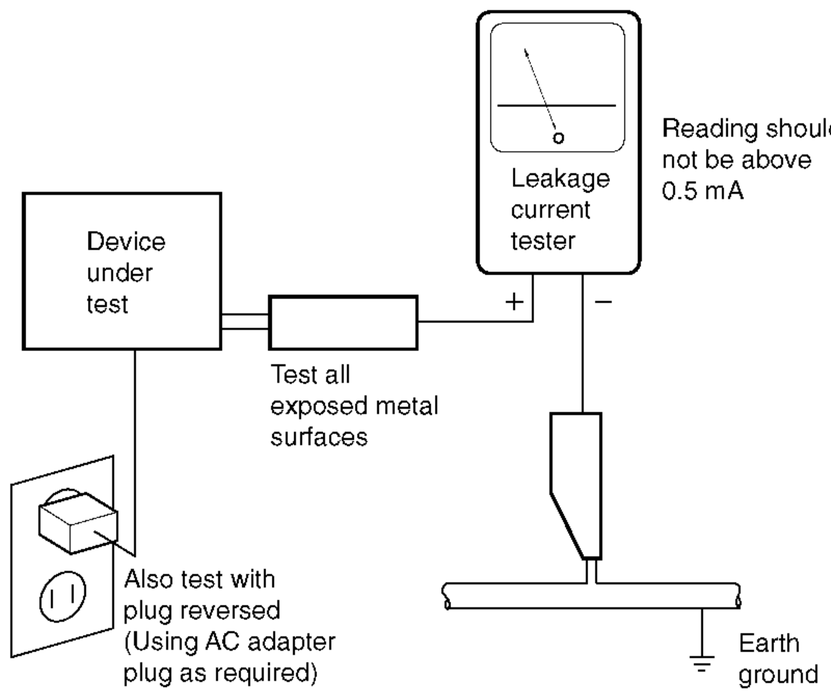
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
+
−
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

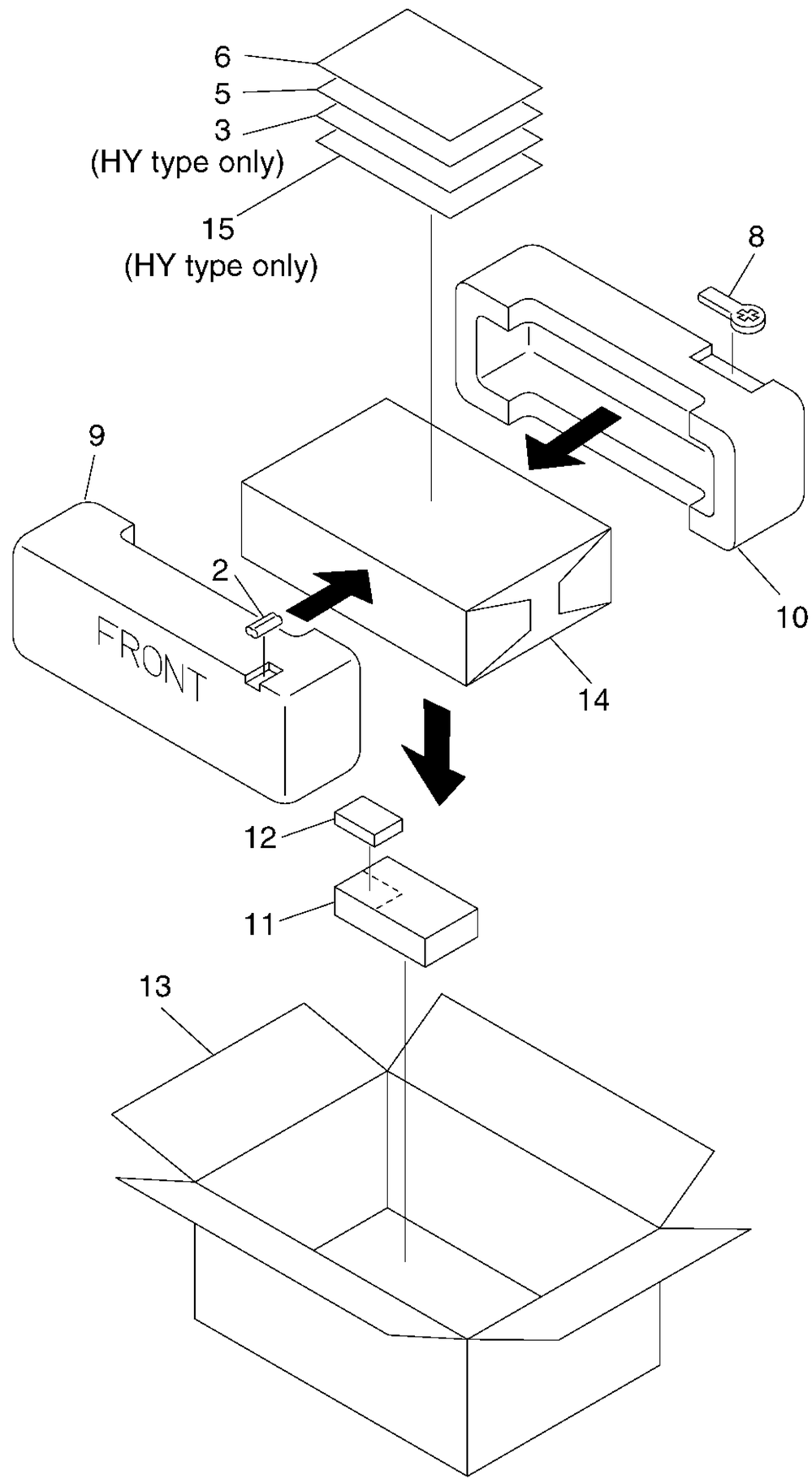
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES: • *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
• *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
• *Screws adjacent to ▼ mark on product are used for disassembly.*

2.1 PACKING



(1) PARTS LIST

Mark	No.	Description	Parts No.
	1	.....	
NSP	2	Alkaline Dry Cell Batteries (LR6, AA)	AEX1007
	3	Operating Instructions	See Contrast table (2)
	4	.....	
	5	Operating Instructions (English)	ARB7123
NSP	6	Warranty Card	ARY7008
	7	.....	
	8	Remote Control Unit (CU-AV014)	AXD7149
	9	Front Pad	AHA7167
	10	Rear Pad	AHA7168
	11	Sub Pad A	AHA7171
	12	Sub Pad B	AHA7172
	13	Packing Case	AHD7471
	14	Packing Sheet	RHC1023
	15	Operating Instructions	See Contrast table (2)

(2) CONTRAST TABLE

HV and HY types have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.		Remarks
			HY TYPE	HV TYPE	
	3	Operating Instructions (French/German/Italian)	ARE7117	Not used	
	15	Operating Instructions (Dutch/Swedish/Spanish/Portuguese)	ARE7121	Not used	

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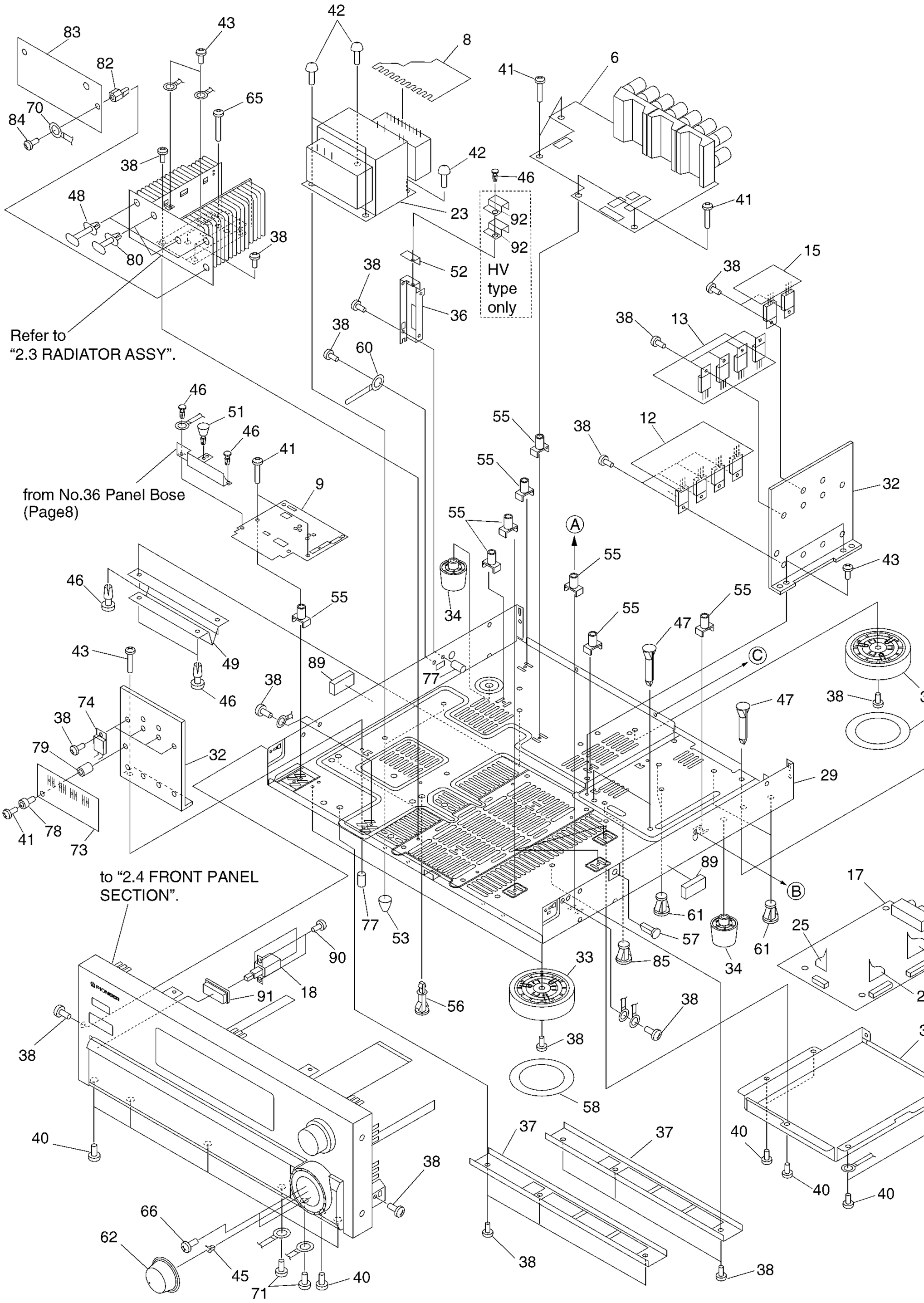
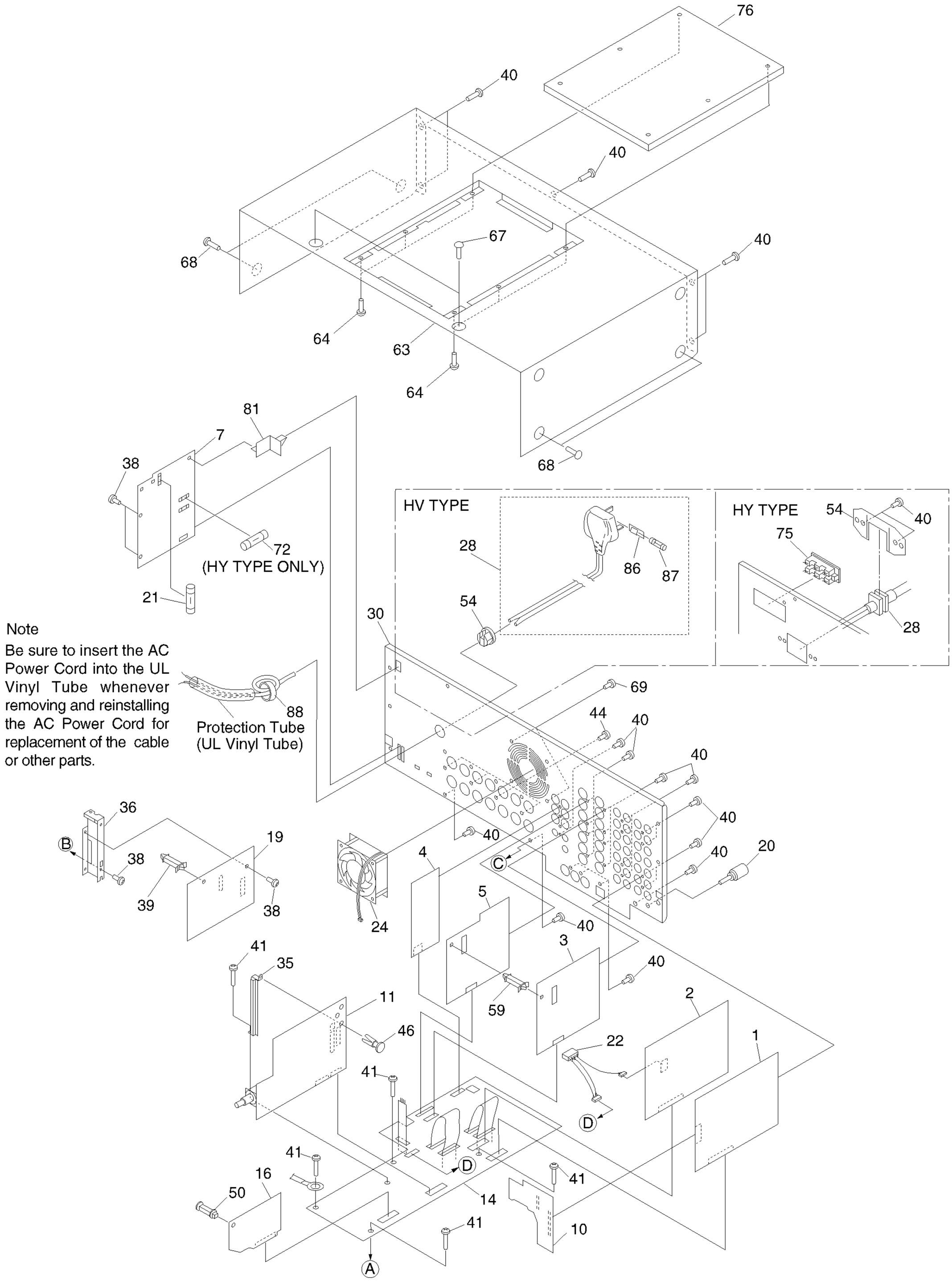
2.2 EXTERIOR




76
40
67
68
64
63
64
40
68
81
7
38
72
(HY TYPE ONLY)
21
HV TYPE
28
86
87
54
30
HY TYPE
54
40
75
28
Note
Be sure to insert the AC Power Cord into the UL Vinyl Tube whenever removing and reinstalling the AC Power Cord for replacement of the cable or other parts.
88
Protection Tube
(UL Vinyl Tube)
69
44
40
40
40
40
40
20
36
B
38
19
39
38
24
4
C
5
40
3
59
40
41
35
11
46
41
2
1
22
D
41
16
50
14
41
10
A

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(1) PARTS LIST

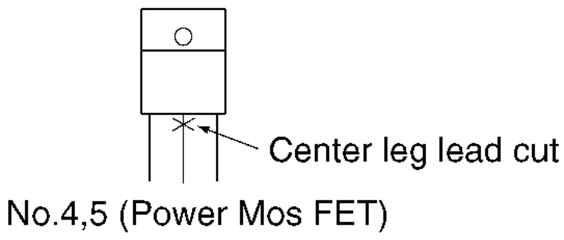
Mark	No.	Description	Parts No.
	1	AUDIO ASSY	AWZ8764
	2	AUDIO/VIDEO ASSY	AWZ8767
	3	VIDEO ASSY	AWZ8770
	4	PRE–OUT & SR ASSY	AWZ8775
	5	S–VIDEO ASSY	AWZ8771
	6	SP TERMINAL ASSY	AWZ8789
	7	PRIMARY ASSY	See Contrast table (2)
	8	TRANS TERMINAL ASSY	AWZ8800
	9	POWER SUPPLY ASSY	AWZ8847
NSP	10	CONNECTION ASSY	AWZ8732
	11	MASTER VR ASSY	AWZ8034
	12	REGULATOR (1) ASSY	AWZ8735
	13	REGULATOR (2) ASSY	AWZ8871
	14	E VR ASSY	AWZ8033
NSP	15	REGULATOR (3) ASSY	AWZ8819
	16	V–AMP ASSY	AWZ8874
	17	DOLBY DIGITAL ASSY	AWX7038
	18	POWER SW ASSY	AWZ8731
	19	LIMITTER ASSY	AWK7406
	20	Terminal Screw	AKE – 031
⚠	21	FU1 Fuse (T4A)	AEK – 514
NSP	22	8P Shielded Cable	ADX1941
⚠	23	T1 Power Transformer	ATS7178
⚠	24	Fan Motor	AXM7012
NSP	25	Jumper Wire	D15A10–200–2651
NSP	26	Jumper Wire 11P	D20PYY1115E
NSP	27	Jumper Wire 15P	D20PYY1515E
⚠	28	AC Power Cord	See Contrast table (2)
NSP	29	Chassis	ANA7061
	30	Rear Panel	See Contrast table (2)
NSP	31	Bottom Plate	ANF7006
NSP	32	Sub Heat Sink	ANH7055
	33	Insulator	PNW2020
	34	Foot	REC1263
	35	PCB Holder	ANG1807
	36	Assy Holder	ANG7121
NSP	37	Sub Flame	ANG7138
	38	Screw	ABA – 298
	39	PCB Holder	PNW2100
	40	Screw (Steel)	ABA1006
	41	Screw	ABA1018
	42	Screw (Steel)	ABA1053
	43	Screw	ABA1054
	44	Screw (Steel)	ABA1208
	45	Adjust Spring	ABK7013
	46	Rivet	AEC – 441
	47	PCB Holder	AEC7073
NSP	48	Card Spacer	REC1156
NSP	49	Barrier	AEC7089
	50	Mini Card Spacer	AEC7092
	51	T Type Push Rivet	AEC7093
	52	Barrier	AEC7095
	53	Stud Cover	AEC7096
⚠	54	AC Cord Spacer	See Contrast table (2)
NSP	55	PCB Mould	AMR1525
	56	Locking Card Spacer	DEC1908
	57	Card Spacer	DNK2769
	58	Stopper	PNM1134
NSP	59	PCB Holder	REC1258
NSP	60	Binder	RNE1277
NSP	61	PC Support	VEC1749
	62	Volume Knob	AAB7144
	63	Bonnet	ANE7176
	64	Screw	BBZ26P080FMC
	65	Screw	BBZ30P300FMC
	66	Screw	BMT30P080FZK
	67	Screw	BBT30P080FNI
	68	Screw	FBT40P080FNI
	69	Screw	IBZ30P100FCC
NSP	70	Cord With Plug (J39)	DE015VF0
	71	Screw	BBZ30P080FZK
⚠	72	FU3 Fuse (T1A)	See Contrast table (2)
NSP	73	DIODE ASSY	AWZ8838
⚠	74	D1 – D4 Fast Recovery Diode	F10KF20
⚠	75	AC Socket 3 – P	See Contrast table (2)
	76	Top Cover	AME7371
	77	Stud Cover	AEC7105
NSP	78	Bush	AEC1293
NSP	79	Bush	AEC1602
	80	PCB Spacer	AEC7108
	81	PCB Hinge	AEC7094
	82	Card Spacer	AEC7098
	83	Shield Plate	ANK7033
	84	Screw	BBZ30P050FMC
	85	Cord Spacer	AEC7111
⚠	86	Fuse Holder	See Contrast table (2)
⚠	87	Fuse (5A)	See Contrast table (2)
⚠	88	Ferrite Core (L1)	ATX7001
NSP	89	Spacer	AEB1254
	90	Screw	BPZ30P080FMC
	91	Power Button B	AAD7389
	92	Barrier	See Contrast table (2)

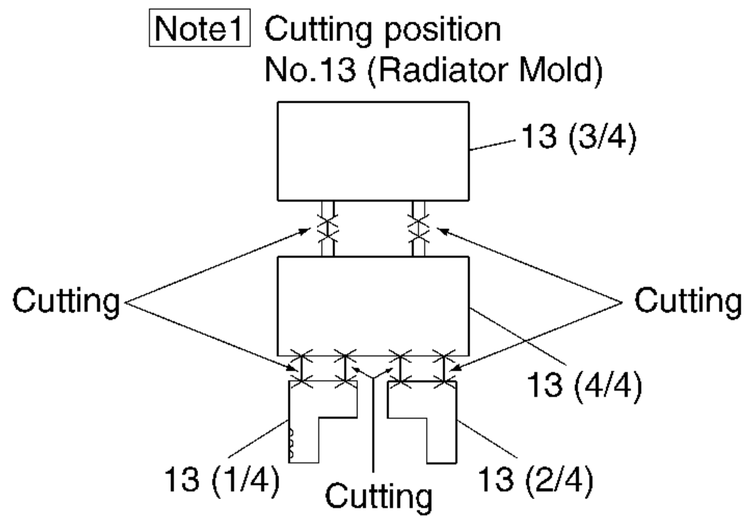
(2) CONTRAST TABLE

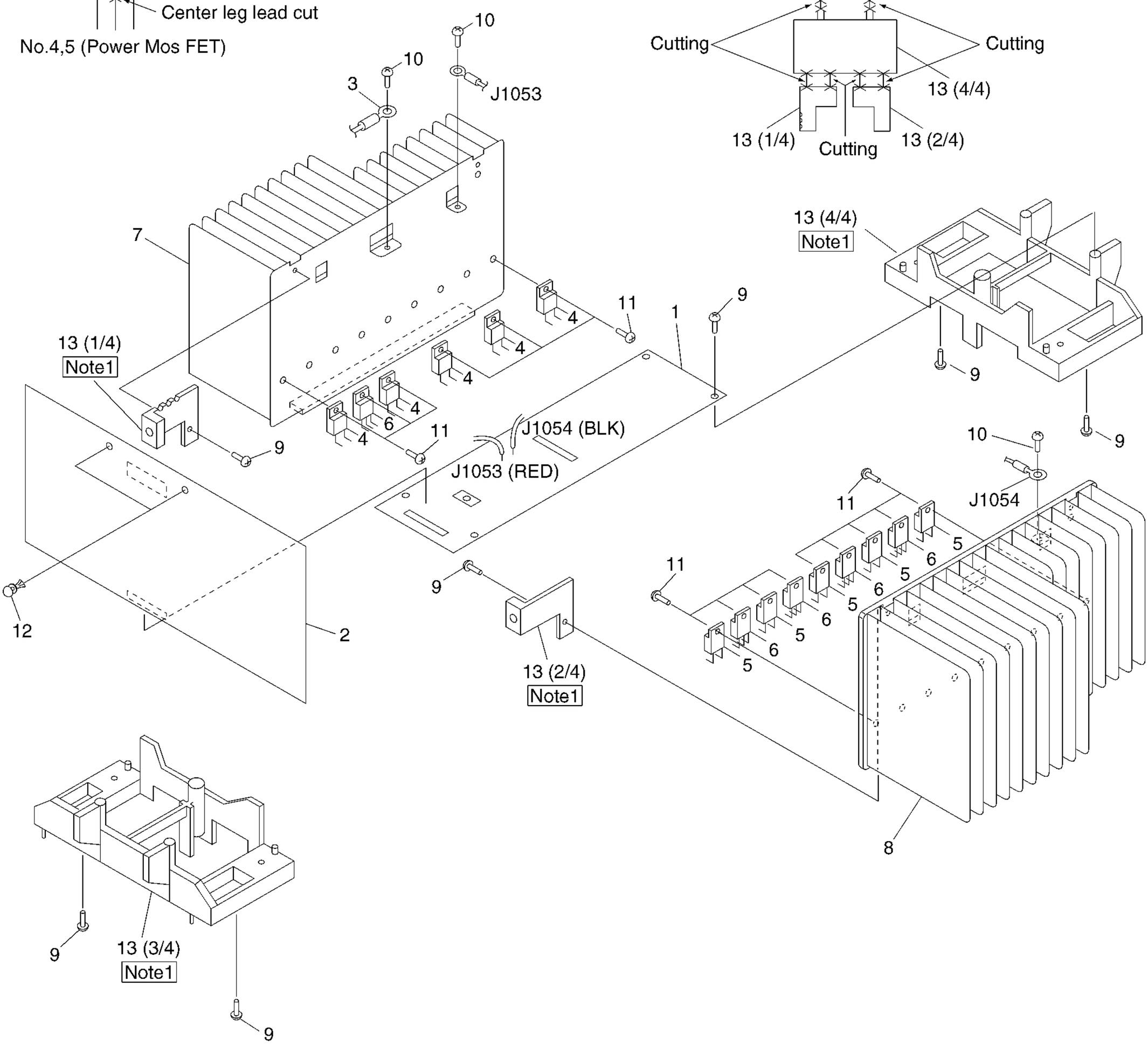
HV and HY types have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.		Remarks
			HY TYPE	HV TYPE	
	7	PRIMARY ASSY	AWZ8791	AWZ8873	
⚠	28	AC Power Cord	ADG1139	VDG1062	
	30	Rear Panel	ANC7580	ANC7584	
⚠	54	AC Cord Spacer	ANG1153	AEP – 113	
⚠	72	FU3 Fuse (T1A)	AEK – 508	Not used	
⚠	75	AC Socket 3-P	AKP – 502	Not used	
⚠	86	Fuse Holder	Not used	VKR1003	
⚠	87	Fuse (5A)	Not used	PEK1003	
	92	Barrier	Not used	AEC7118	

2.3 RADIATOR ASSY (POWER AMP ASSY)







• PARTS LIST

Mark	No.	Description	Parts No.
	1	CURR DRIVE ASSY	AWZ8717
	2	VOLTAGE AMP ASSY	AWZ8716
	3	TH901 Thermistor	AEX7004
⚠	4	Q41 – Q45 Power Mos FET	IRF540
⚠	5	Q51 – Q55 Power Mos FET	IRF9540
⚠	6	Q21, Q22, Q31 – Q33 Transistor	2SC4793
NSP	7	Radiator	ANH7054
NSP	8	Radiator	ANH7061
	9	Screw	ABA – 298
	10	Screw	ABA1054
	11	Screw (Steel)	ABA1194
	12	Rivet	AEC – 441
	13	Radiator Mold	AMR7173

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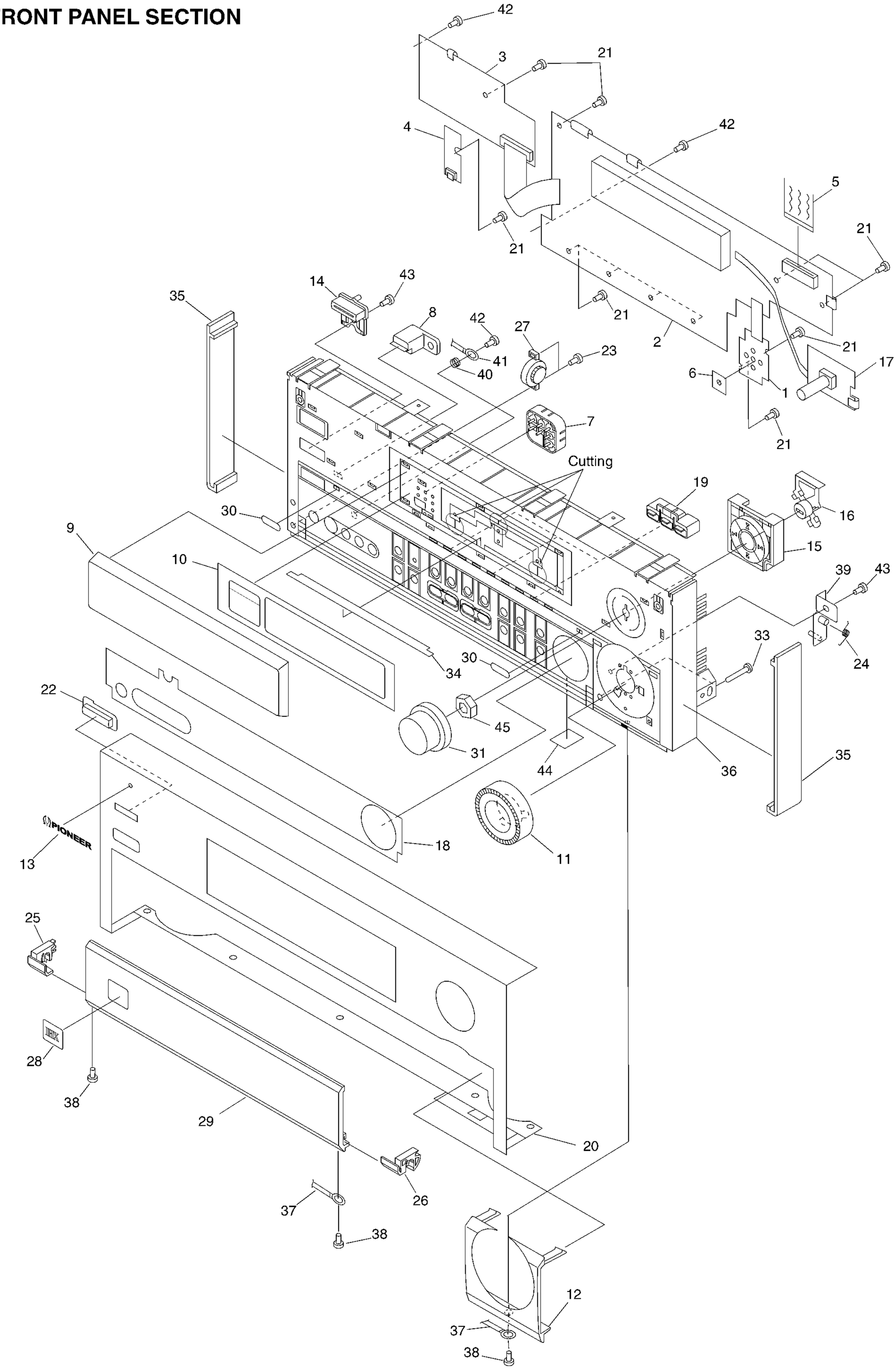
2.4 FRONT PANEL SECTION



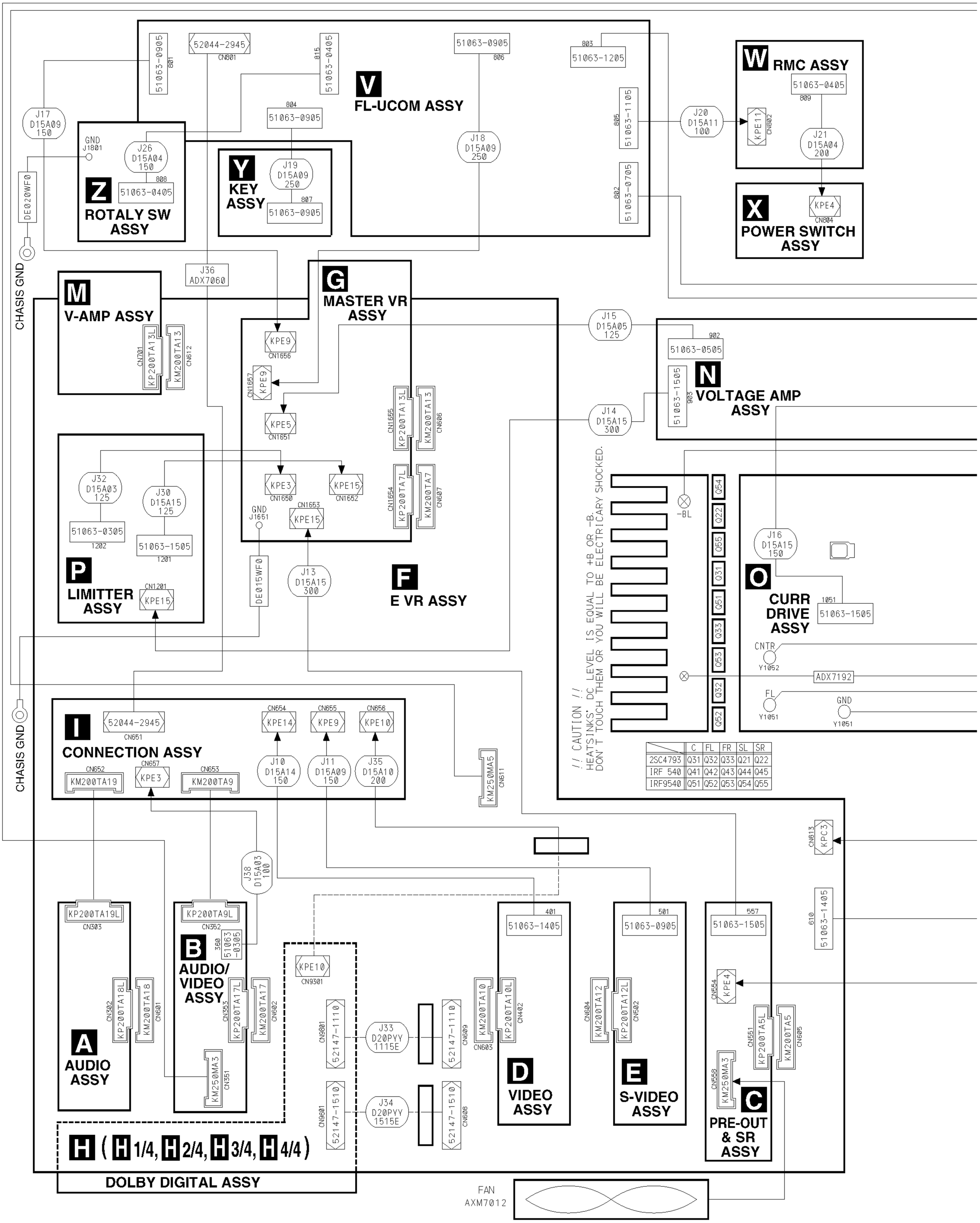
• PARTS LIST

Mark	No.	Description	Parts No.
NSP	1	KEY ASSY	AWZ8724
	2	FL-UCOM ASSY	AWZ8780
NSP	3	RMC ASSY	AWZ8783
NSP	4	POWER SWITCH ASSY	AWZ8785
	5	FFC 29P	ADD7060
	6	Himelon Sheet	AED7019
	7	LED Lens	AAK7377
	8	Standby Lens	AAK7378
	9	Display Panel	AAK7426
	10	FL Filter	AAK7425
	11	Volume Ring	AAK7433
	12	Sub Panel	ANB7101
	13	Name Plate	VAM1051
	14	Power Button A	AAD7388
	15	5-Action Button	AAD7390
	16	Enter Button	AAD7432
NSP	17	ROTALY SW ASSY	AWZ8726
	18	AL Plate	AAH7006
	19	Function Lens	AAK7427
	20	Front Panel	ANB7099
	21	Screw	BPZ30P080FMC
	22	Remocon Window	AAK7432
	23	Screw	BPZ20P080FMC
	24	Spring	ABH7151
	25	Door Hinge L	AMR7182
	26	Door Hinge R	AMR7183
	27	Damper	AXA7053
	28	THX Badge	AAM7006
	29	Door Panel	ANB7100
	30	Door Cushion	AEB7082
	31	Volume Knob S	AAB7128
	32	.....	
	33	Eject Button	AAD7393
	34	PVC Sheet	AEC7107
	35	Side Panel	AAH7005
	36	Panel Base	AMB7445
NSP	37	Cord With Plug	ADH7016
	38	Screw	ABA – 298
	39	Eject Assy	ANG7142
NSP	40	Spring	ABH7115
NSP	41	Cord With Plug	DE020VF0
	42	Screw With Washer	ABA1005
	43	Screw	IPZ30P080FMC
	44	PVC Sheet	AEC7109
	45	Nut	NK70FCU

3. SCHEMATIC DIAGRAM

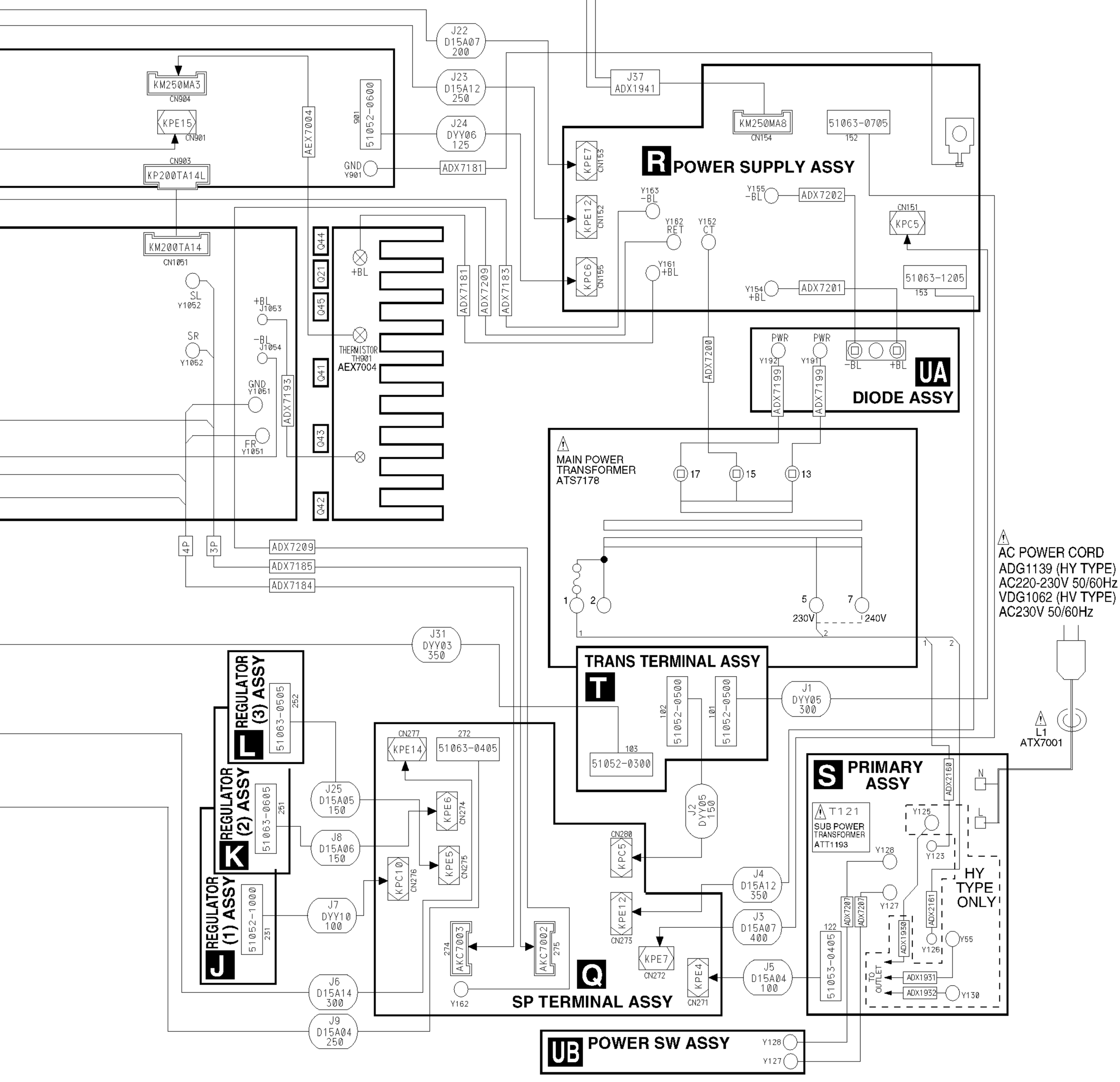
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

3.1 OVERALL CONNECTION DIAGRAM

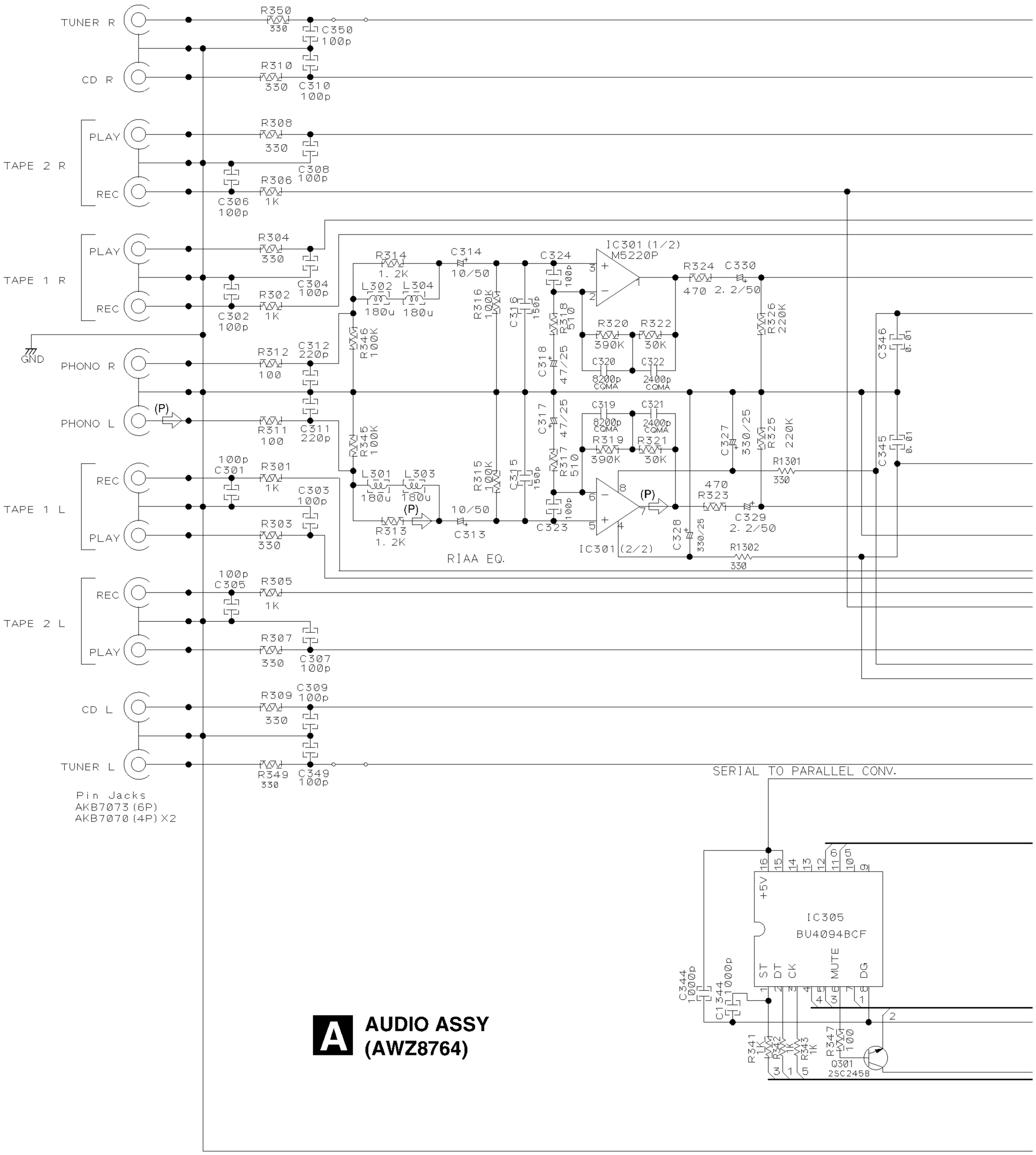

V FL-UCOM ASSY
Z ROTALY SW ASSY
Y KEY ASSY
W RMC ASSY
X POWER SWITCH ASSY
M V-AMP ASSY
G MASTER VR ASSY
F E VR ASSY
N VOLTAGE AMP ASSY
O CURR DRIVE ASSY
P LIMITTER ASSY
I CONNECTION ASSY
B AUDIO/ VIDEO ASSY
A AUDIO ASSY
D VIDEO ASSY
E S-VIDEO ASSY
C PRE-OUT & SR ASSY
H (H 1/4, H 2/4, H 3/4, H 4/4)
DOLBY DIGITAL ASSY
CHASIS GND
// CAUTION //
HEATSINKS' DC LEVEL IS EQUAL TO +B OR -B.
DON'T TOUCH THEM OR YOU WILL BE ELECTRICARY SHOCKED.
FAN
AXM7012

	C	FL	FR	SL	SR
2SC4793	Q31	Q32	Q33	Q21	Q22
IRF 540	Q41	Q42	Q43	Q44	Q45
IRF9540	Q51	Q52	Q53	Q54	Q55

		HY TYPE	HV TYPE			HY TYPE	HV TYPE
A	AUDIO ASSY	AWZ8764	AWZ8764	O	CURR DRIVE ASSY	AWZ8717	AWZ8717
B	AUDIO/VIDEO ASSY	AWZ8767	AWZ8767	P	LIMITTER ASSY	AWK7406	AWK7406
C	PRE-OUT & SR ASSY	AWZ8775	AWZ8775	Q	SP TERMINAL ASSY	AWZ8789	AWZ8789
D	VIDEO ASSY	AWZ8770	AWZ8770	R	POWER SUPPLY ASSY	AWZ8847	AWZ8847
E	S-VIDEO ASSY	AWZ8771	AWZ8771	S	PRIMARY ASSY	AWZ8791	AWZ8873
F	E VR ASSY	AWZ8033	AWZ8033	T	TRANS TERMINAL ASSY	AWZ8800	AWZ8800
G	MASTER VR ASSY	AWZ8034	AWZ8034	UA	DIODE ASSY	AWZ8838	AWZ8838
H	DOLBY DIGITAL ASSY	AWX7038	AWX7038	UB	POWER SW ASSY	AWZ8731	AWZ8731
I	CONNECTION ASSY	AWZ8732	AWZ8732	V	FL-UCOM ASSY	AWZ8780	AWZ8780
J	REGULATOR (1) ASSY	AWZ8735	AWZ8735	W	RMC ASSY	AWZ8783	AWZ8783
K	REGULATOR (2) ASSY	AWZ8871	AWZ8871	X	POWER SWITCH ASSY	AWZ8785	AWZ8785
L	REGULATOR (3) ASSY	AWZ8819	AWZ8819	Y	KEY ASSY	AWZ8724	AWZ8724
M	V-AMP ASSY	AWZ8874	AWZ8874	Z	ROTALY SW ASSY	AWZ8726	AWZ8726
N	VOLTAGE AMP ASSY	AWZ8716	AWZ8716				



3.2 AUDIO ASSY



A AUDIO ASSY (AWZ8764)

NOTED

1. RESISTORS

Indicated in ohm 1/4W ±5% tolerance unless otherwise noted k:Kohm. M:Mohm

Chip Resistor

2. CAPACITORS

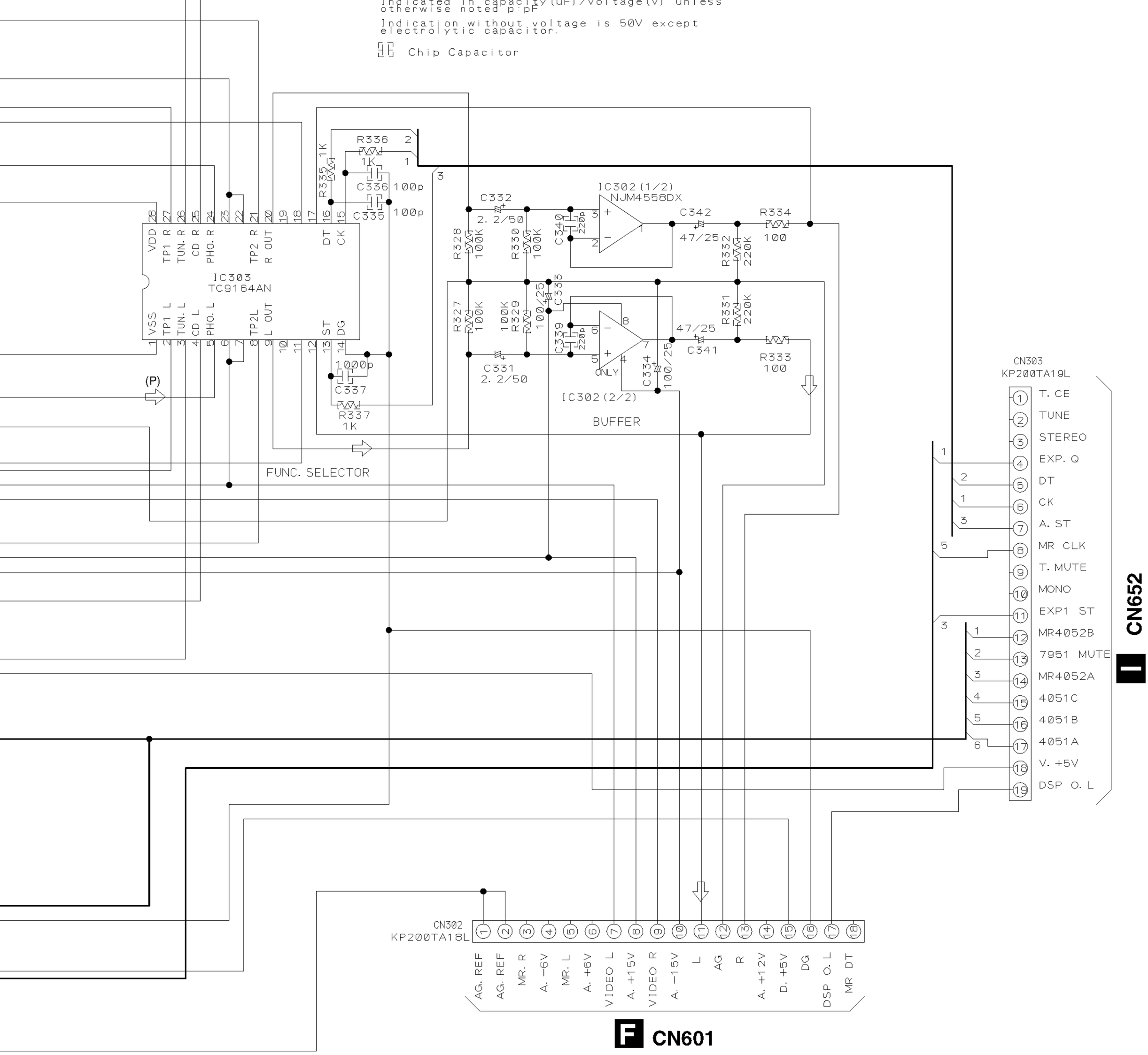
Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF

Indication without voltage is 50V except electrolytic capacitor.

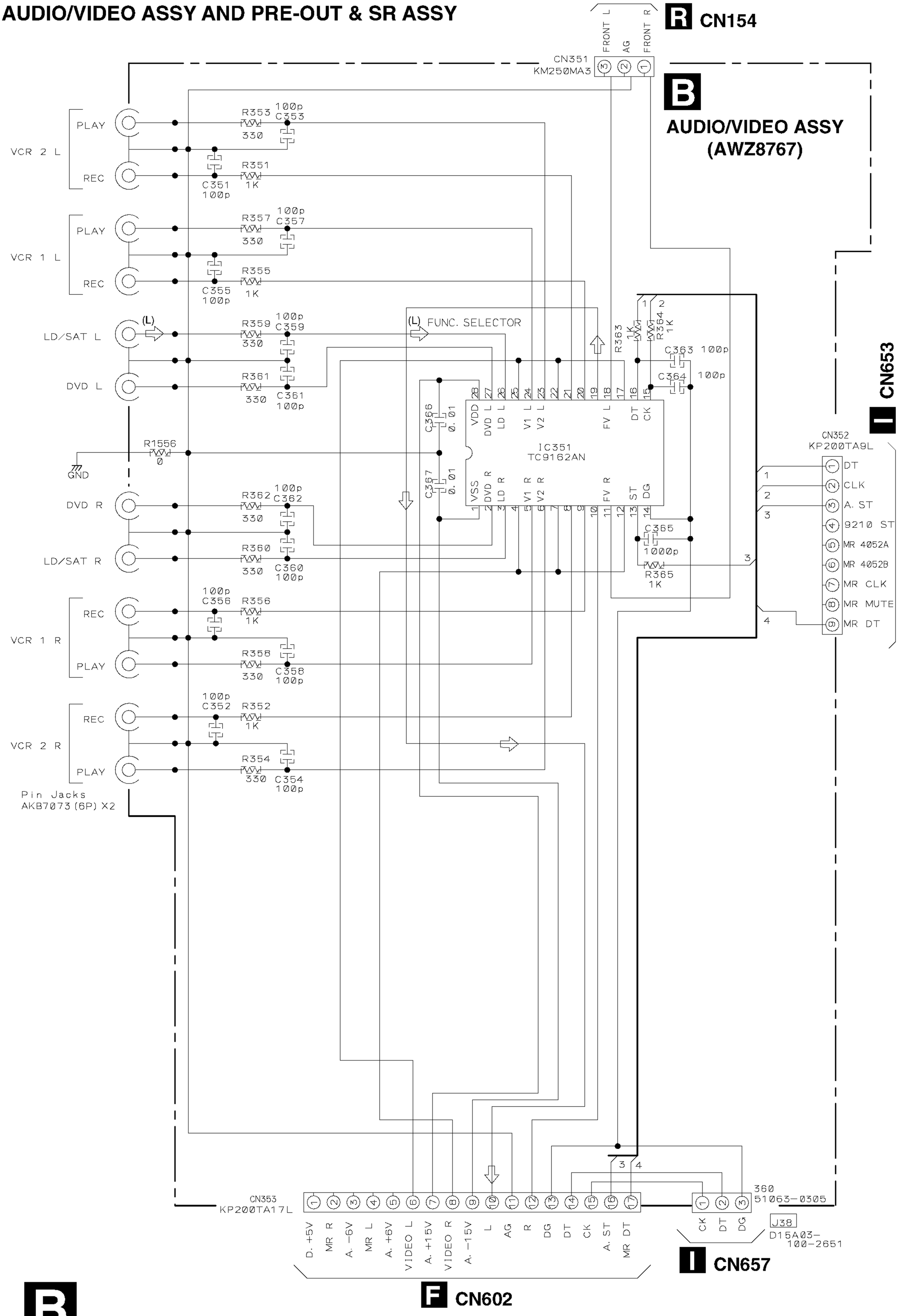
Chip Capacitor

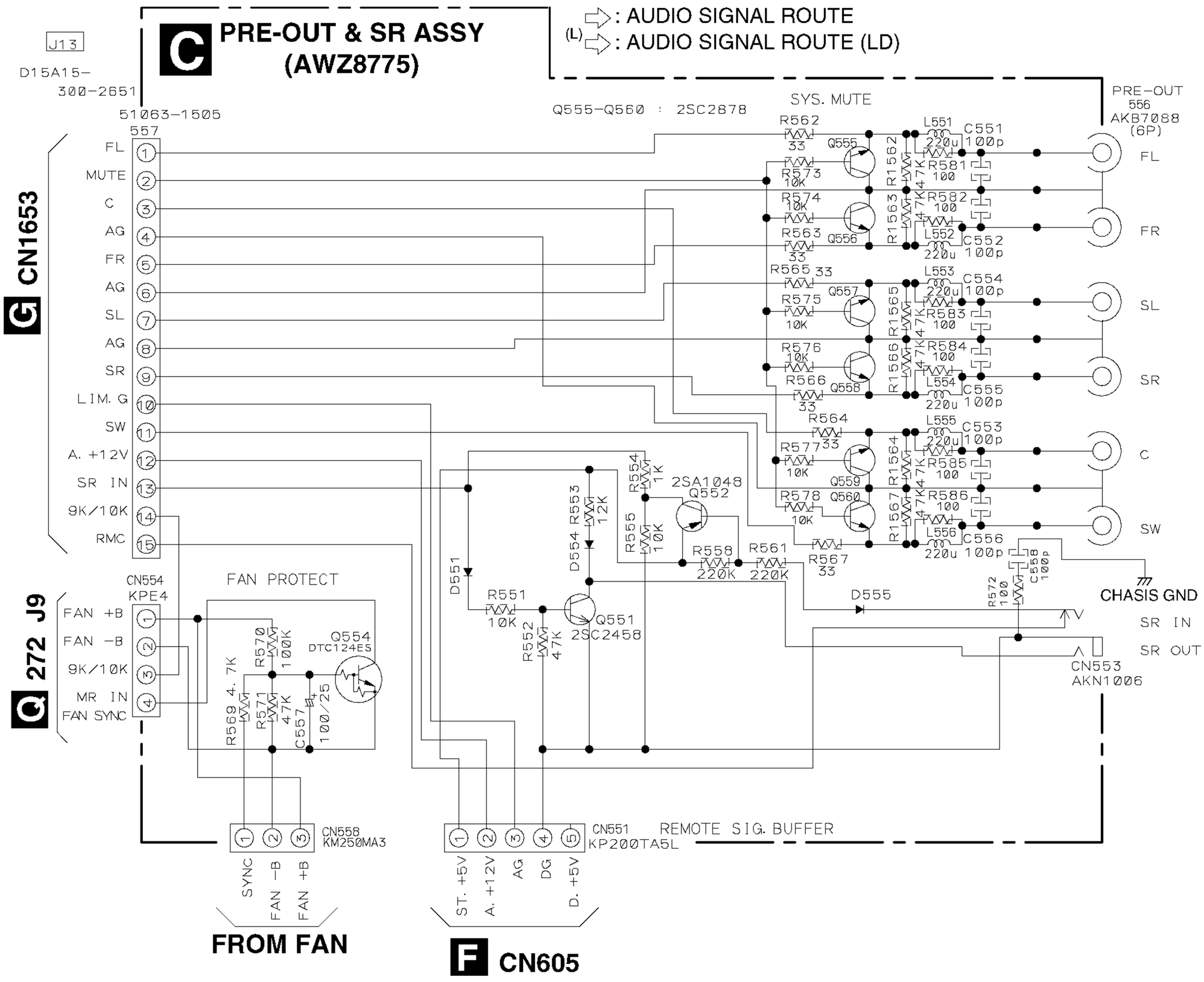
⇨ : AUDIO SIGNAL ROUTE

(P) ⇨ : AUDIO SIGNAL ROUTE (PHONO)



3.3 AUDIO/VIDEO ASSY AND PRE-OUT & SR ASSY





NOTED

1. RESISTORS

   Indicated in ohm 1/4W ±5% tolerance unless otherwise noted K:Kohm, M:Mohm

   Chip Resistor

2. CAPACITORS

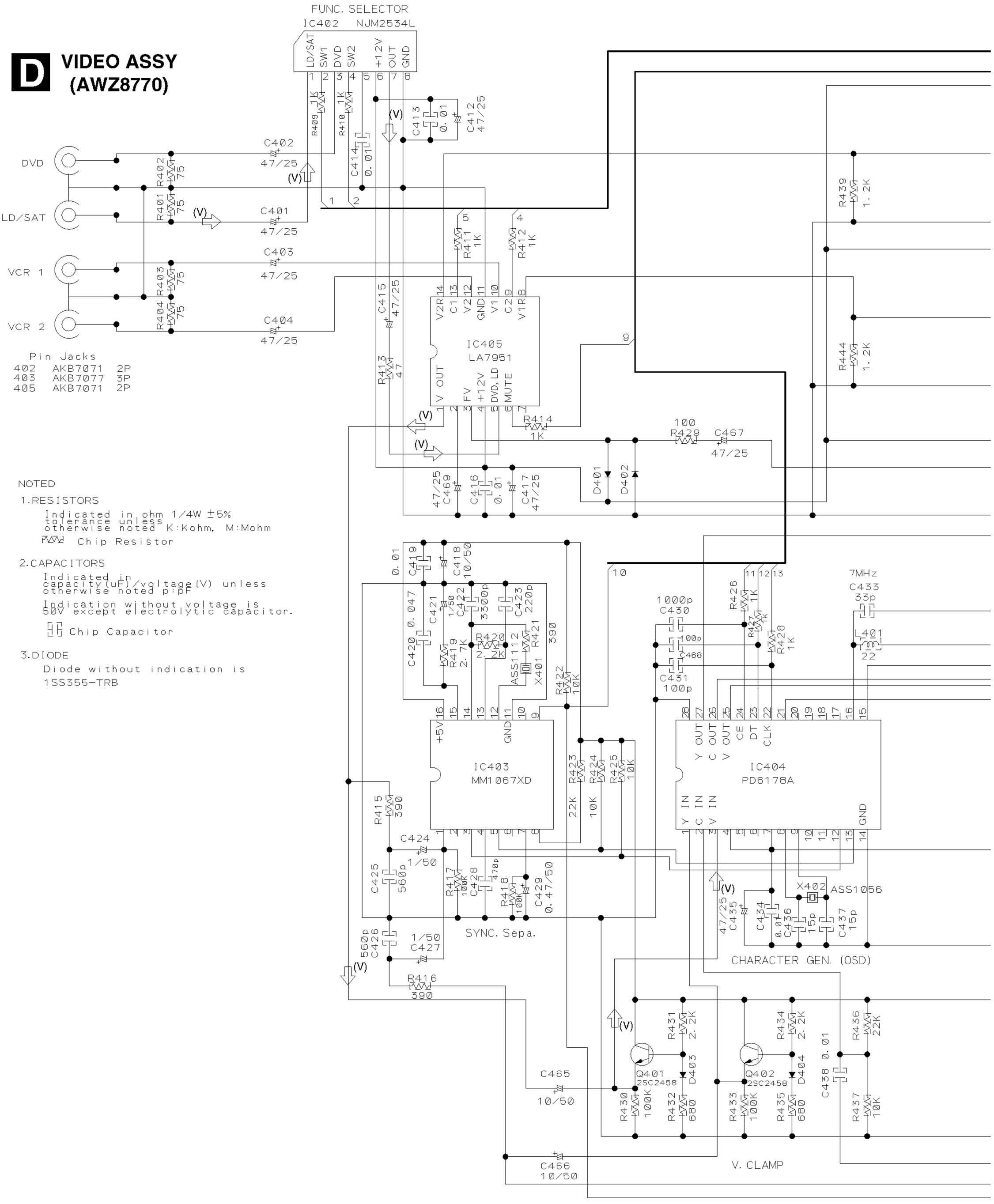
   Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF
   Indication without voltage is 50V except electrolytic capacitor.

   Chip Capacitor

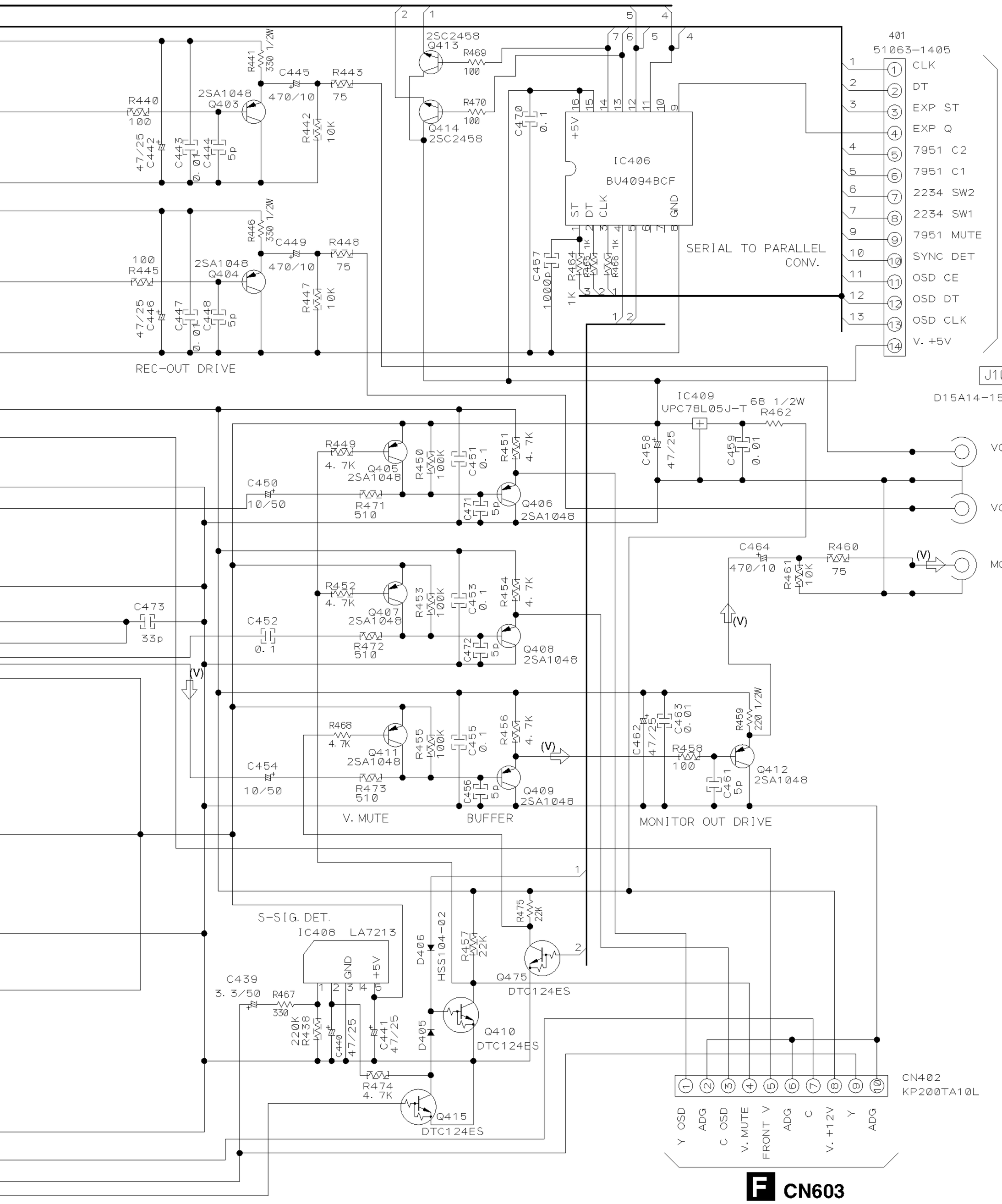
3. DIODE

   1SS355-TRB

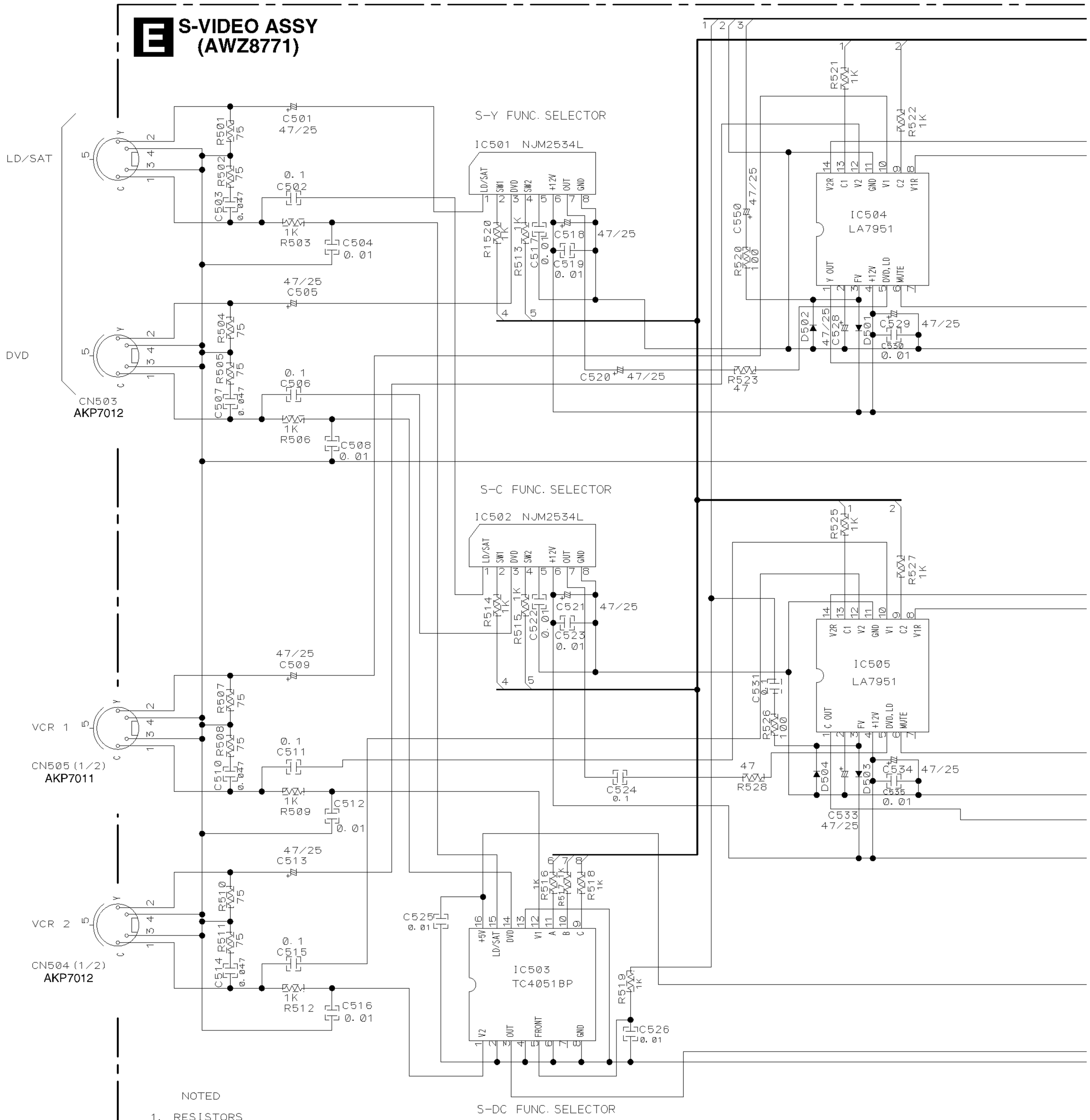
3.4 VIDEO ASSY

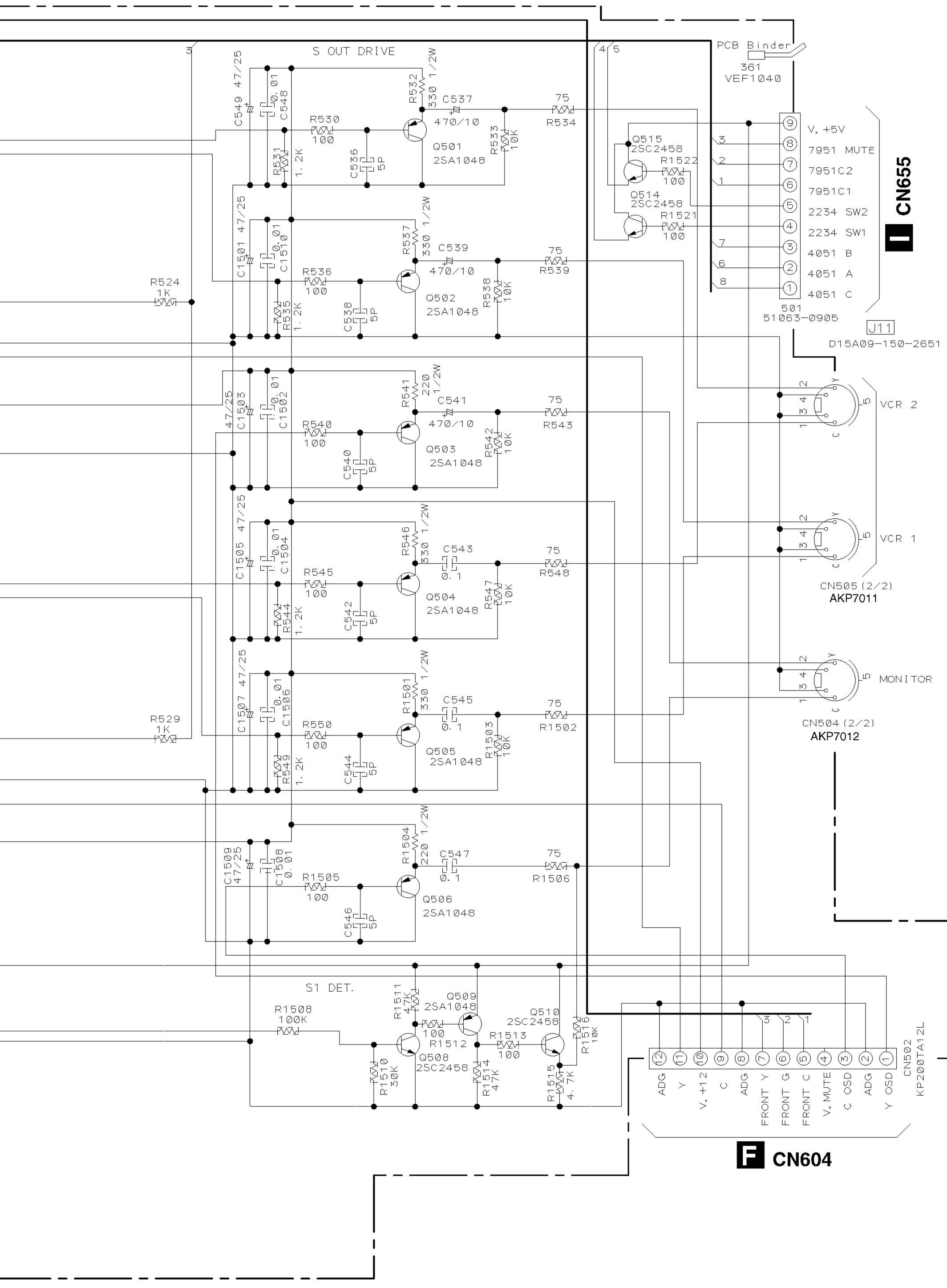


(V) ⇨ : VIDEO SIGNAL ROUTE

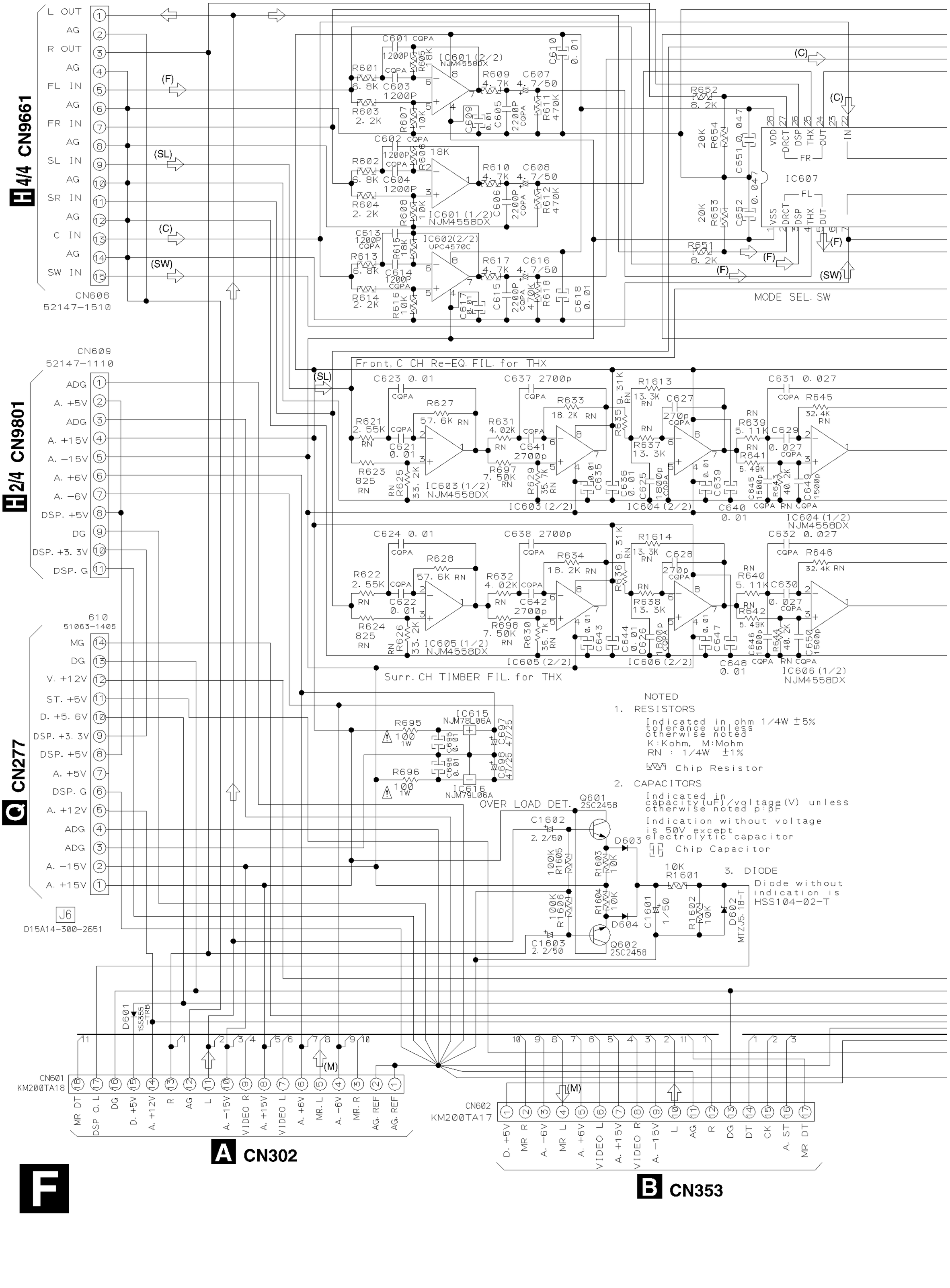


3.5 S-VIDEO ASSY




S OUT DRIVE
PCB Binder
361
VEF1040
R524
1K
R529
1K
C549 47/25
C548 0.01
R530 100
R531 1.2K
C536 5P
R532 330 1/2W
C537 470/10
Q501 2SA1048
R533 10K
75
R534
C1501 47/25
C1510 0.01
R536 100
R535 1.2K
C538 5P
R537 330 1/2W
C539 470/10
Q502 2SA1048
R538 10K
75
R539
C1503 47/25
C1502 0.01
R540 100
C540 5P
R541 220 1/2W
C541 470/10
Q503 2SA1048
R542 10K
75
R543
C1505 47/25
C1504 0.01
R545 100
R544 1.2K
C542 5P
R546 330 1/2W
C543 0.1
Q504 2SA1048
R547 10K
75
R548
C1507 47/25
C1506 0.01
R550 100
R549 1.2K
C544 5P
R1501 330 1/2W
C545 0.1
Q505 2SA1048
R1503 10K
75
R1502
C1509 47/25
C1508 0.01
R1505 100
C546 5P
R1504 220 1/2W
C547 0.1
Q506 2SA1048
75
R1506
S1 DET.
R1508 100K
R1511 47K
Q509 2SA1048
100
R1512
Q508 2SC2458
R1510 30K
R1513 100
Q510 2SC2458
R1516 10K
R1514 47K
R1515 4.7K
Q515 2SC2458
R1522 100
Q514 2SC2458
R1521 100
V. +5V
7951 MUTE
7951C2
7951C1
2234 SW2
2234 SW1
4051 B
4051 A
4051 C
501
51063-0905
J11
D15A09-150-2651
CN655
VCR 2
VCR 1
CN505 (2/2)
AKP7011
MONITOR
CN504 (2/2)
AKP7012
CN502
KP200TA12L
ADG
Y
V. +12
C
ADG
FRONT Y
FRONT G
FRONT C
V. MUTE
C OSD
ADG
Y OSD
CN604

3.6 E VR ASSY


H 4/4 CN9661
L OUT
AG
R OUT
AG
FL IN
AG
FR IN
AG
SL IN
AG
SR IN
AG
C IN
AG
SW IN
CN608
52147-1510
(F)
(SL)
(C)
(SW)
C601 CQPA 1200P
R601 6.8K
CQPA C603 1200P
R603 2.2K
R605 18K
R607 10K
IC601(2/2) NJM4558DX
R609 4.7K
C607 4.7/50
C609 0.01
C605 2200P CQPA
R611 470K
C610 0.01
C602 CQPA 1200P
R602 6.8K
C604 1200P CQPA
R604 2.2K
R606 18K
R608 10K
IC601(1/2) NJM4558DX
R610 4.7K
C608 4.7/50
C606 2200P CQPA
R612 470K
C613 1200P CQPA
R613 6.8K
C614 1200P CQPA
R614 2.2K
R615 18K
R616 10K
IC602(2/2) UPC4570C
R617 4.7K
C616 4.7/50
C615 2200P CQPA
R618 470K
C618 0.01
C617 0.01
R652 8.2K
20K R654
C651 0.047
R653 20K
C652 0.047
IC607
VDD DRCT DSP THX OUT IN
VSS DRCT DSP THX OUT
FL
R651 8.2K
MODE SEL. SW
H 2/4 CN9801
CN609
52147-1110
ADG
A. +5V
ADG
A. +15V
A. -15V
A. +6V
A. -6V
DSP. +5V
DG
DSP. +3.3V
DSP. G
Front, C CH Re-EQ. FIL. for THX
C623 0.01
R621 2.55K
C621 0.01
R627 57.6K RN
R623 825 RN
R625 33.2K RN
IC603(1/2) NJM4558DX
C637 2700p
R631 4.02K
C641 2700p
R633 18.2K RN
R629 7.50K RN
R635 9.31K RN
IC603(2/2)
R1613 13.3K RN
R637 13.3K RN
C627 270p CQPA
C636 0.01
C625 1800p CQPA
C639 0.01
IC604(2/2)
C631 0.027 CQPA
R645 32.4K RN
R639 5.11K RN
C629 0.027 CQPA
R641 5.49K RN
C645 1500p
R643 40.2K RN
C649 1500p
C640 0.01
IC604(1/2) NJM4558DX
C624 0.01
R622 2.55K
C622 0.01
R628 57.6K RN
R624 825 RN
R626 33.2K RN
IC605(1/2) NJM4558DX
C638 2700p
R632 4.02K
C642 2700p
R634 18.2K RN
R630 7.50K RN
R636 9.31K RN
IC605(2/2)
R1614 13.3K RN
R638 13.3K RN
C628 270p CQPA
C644 0.01
C626 1800p CQPA
C647 0.01
IC606(2/2)
C632 0.027 CQPA
R646 32.4K RN
R640 5.11K RN
C630 0.027 CQPA
R642 5.49K RN
C646 1500p
R644 40.2K RN
C650 1500p
C648 0.01
IC606(1/2) NJM4558DX
Surr. CH TIMBER FIL. for THX
NOTED
1. RESISTORS
Indicated in ohm 1/4W ±5% tolerance unless otherwise noted
K:Kohm, M:Mohm
RN : 1/4W ±1%
Chip Resistor
2. CAPACITORS
Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF
Indication without voltage is 50V except electrolytic capacitor
Chip Capacitor
3. DIODE
Diode without indication is HSS104-02-T
Q CN277
610
51063-1405
MG
DG
V. +12V
ST. +5V
D. +5.6V
DSP. +3.3V
DSP. +5V
A. +5V
DSP. G
A. +12V
ADG
ADG
A. -15V
A. +15V
J6
D15A14-300-2651
IC615 NJM78L06A
R695 100 1W
C695 0.01
C697 47/25
R696 100 1W
C696 0.01
C698 47/25
IC615 NJM79L06A
OVER LOAD DET.
Q601 2SC2458
C1602 2.2/50
100K R1605
R1603 10K
D603
10K R1601
100K R1606
R1604 10K
D604
C1601 1/50
R1602 10K
D602 MTZJ5.1B-T
C1603 2.2/50
Q602 2SC2458
D601 1SS355-TRB
CN601
KM200TA18
MR DT
DSP O.L
DG
D. +5V
A. +12V
R
AG
L
A. -15V
VIDEO R
A. +15V
VIDEO L
A. +6V
MR. L
A. -6V
MR. R
AG. REF
AG. REF
(M)
A CN302
CN602
KM200TA17
D. +5V
MR R
A. -6V
MR L
A. +6V
VIDEO L
A. +15V
VIDEO R
A. -15V
L
AG
R
DG
DT
CK
A. ST
MR DT
(M)
B CN353

F E VR ASSY (AWZ8033)

T 103 J31

(F) : AUDIO SIGNAL ROUTE (FRONT)
(SL) : AUDIO SIGNAL ROUTE (REAR)
(C) : AUDIO SIGNAL ROUTE (CENTER)
(SW) : AUDIO SIGNAL ROUTE (SW)
(M) : AUDIO SIGNAL ROUTE (MROUT)

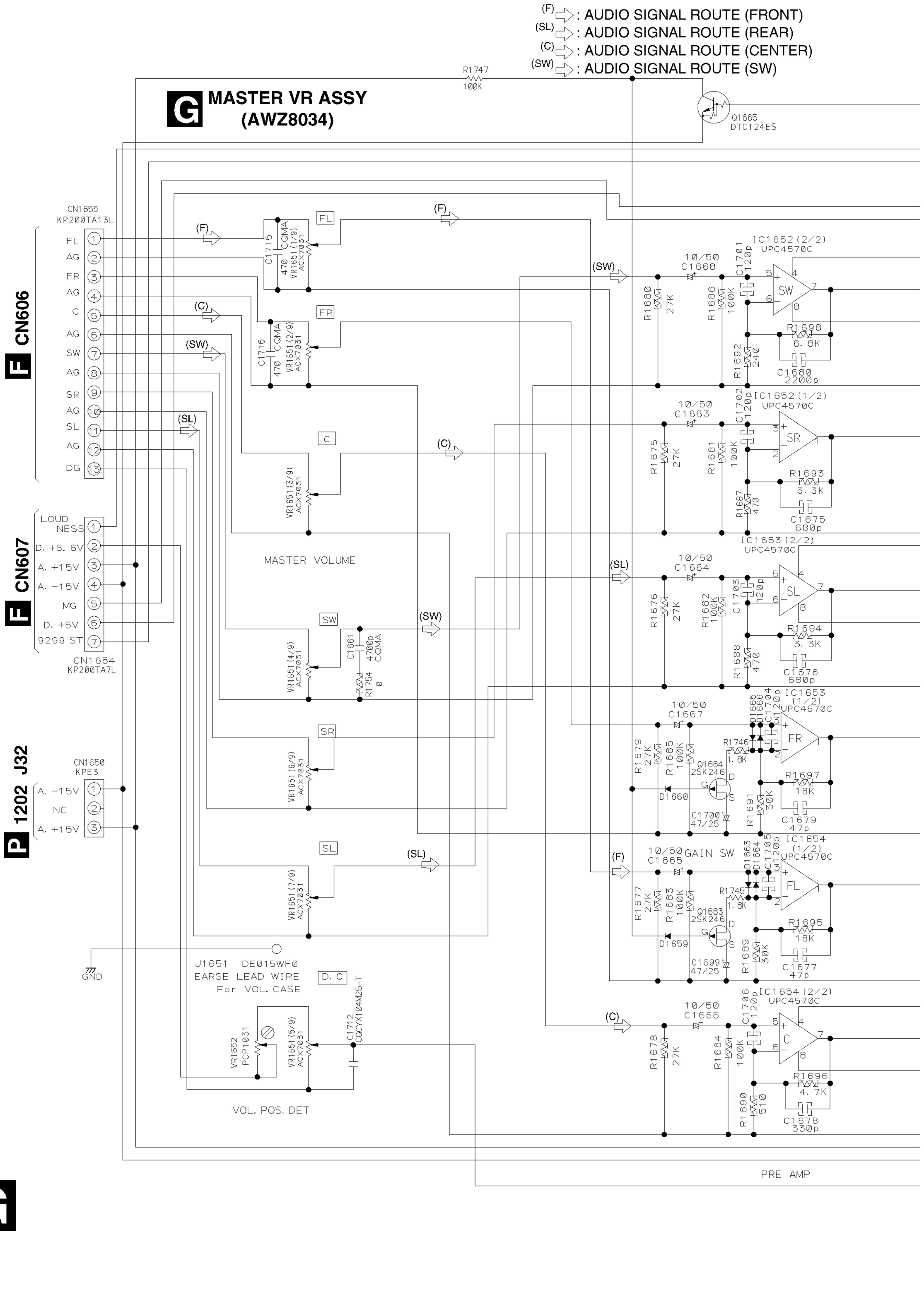
Front, C CH 3.5dB AMP

IC611(2/2) UPC4570C
IC611(1/2) UPC4570C
IC602(1/2) UPC4570C
IC612(1/2) UPC4570C
IC612(2/2) UPC4570C
IC613(1/2) UPC4570G2-TFB
IC613(2/2) UPC4570G2-TFB
IC614(2/2) UPC4570G2-TFB
IC614(1/2) UPC4570G2-TFB
TC9163AN
IC608 TC9299P
IC609 TC9299P
IC610 TC9299P
LOUDNESS/BUFFER
6dB AMP
CH. LELEL CONT. VOL.
Q604 2SC2878
Q605 DTA124ES
Q603 2SC2878
KN601 VNF1084
D605
D606

CN613 KPC3 (A. −40V, GND, A. +40V)
CN612 KM200TA13 (FR, AG, AG, FL, A. +40V, AG, A. −40V, FL, AG, FR, AG, A. −15V, A. +15V)
CN606 KM200TA13 (FL, AG, FR, AG, C, AG, SW, AG, SR, AG, SL, AG, DG)
CN607 KM200TA7 (LOUDNESS, D. +5. 6V, A. +15V, A. −15V, MG, D. +5V, 9299 ST)
CN611 KM250MA5 (ST. +5V, A. +12V, AG, DG, D. +5V)
CN605 KM200TA5
CN603 KM200TA10 (ADG, Y, V. +12V, C, ADG, FRONT V, V. MUTE, C OSD, ADG, Y OSD)
CN604 KM200TA12 (Y OSD, ADG, C OSD, V. MUTE, FRONT C, FRONT G, FRONT Y, ADG, C, V. +12V, Y, ADG)

M CN701
G CN1655
G CN1654
R CN154
C CN551
D CN402
E CN502

3.7 MASTER VR ASSY



V 801 J17

V 806 J18

NOTED

1. RESISTORS
   Indicated in ohm 1/4W ±5% tolerance unless otherwise noted K:Kohm, M:Mohm
   Chip Resistor

2. CAPACITORS
   Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF
   Indication without voltage is 50V except electrolytic capacitor
   Chip Capacitor

3. DIODE
   Diode without indication is 1SS355-TRB

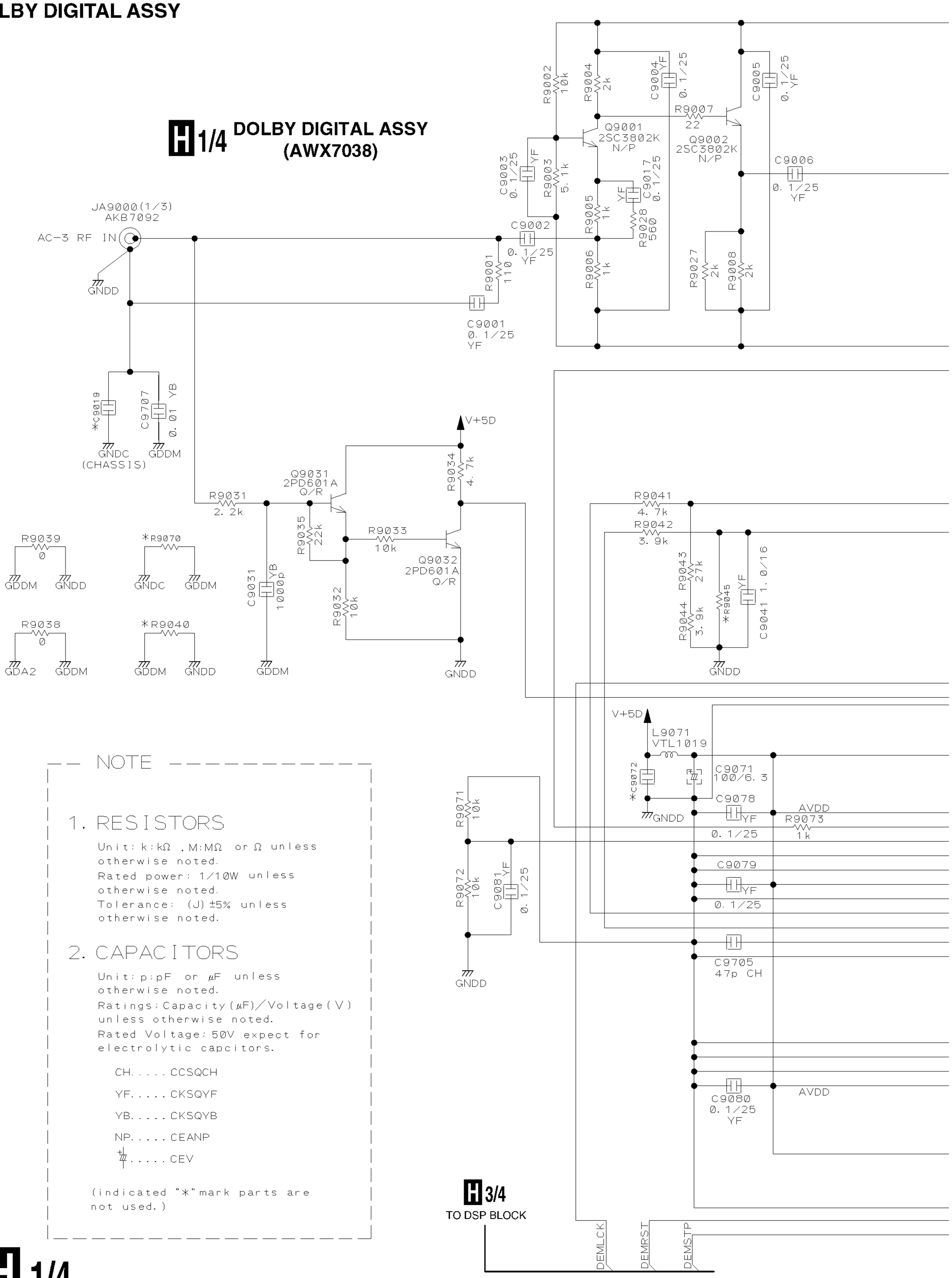
N 902 J15

P 1201 J30

C 557 J13

3.8 DOLBY DIGITAL ASSY

H 1/4 DOLBY DIGITAL ASSY (AWX7038)



-- NOTE ----------

1. RESISTORS

Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

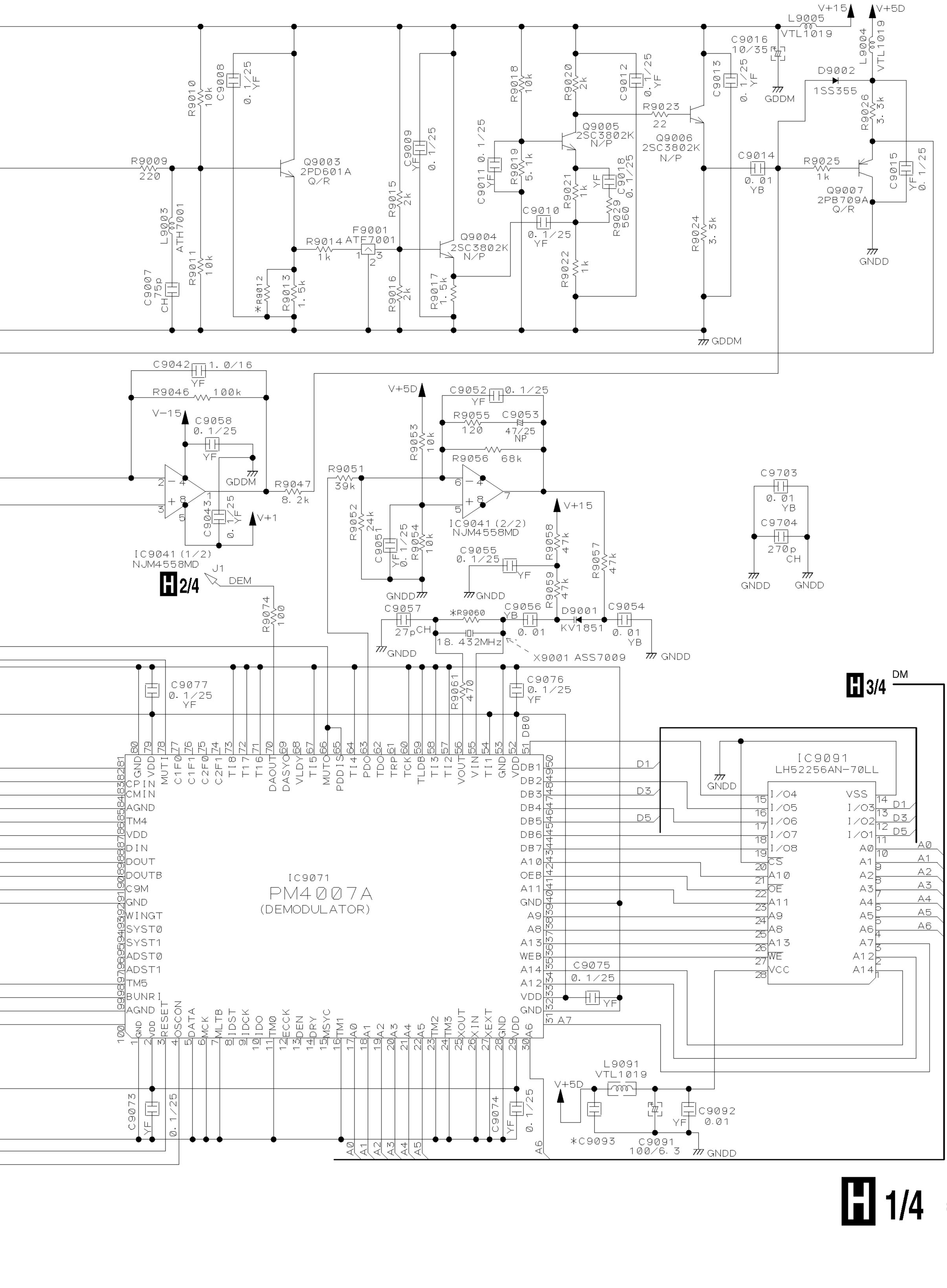
2. CAPACITORS

Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

CH. . . . . CCSQCH
YF. . . . . CKSQYF
YB. . . . . CKSQYB
NP. . . . . CEANP
. . . . . CEV

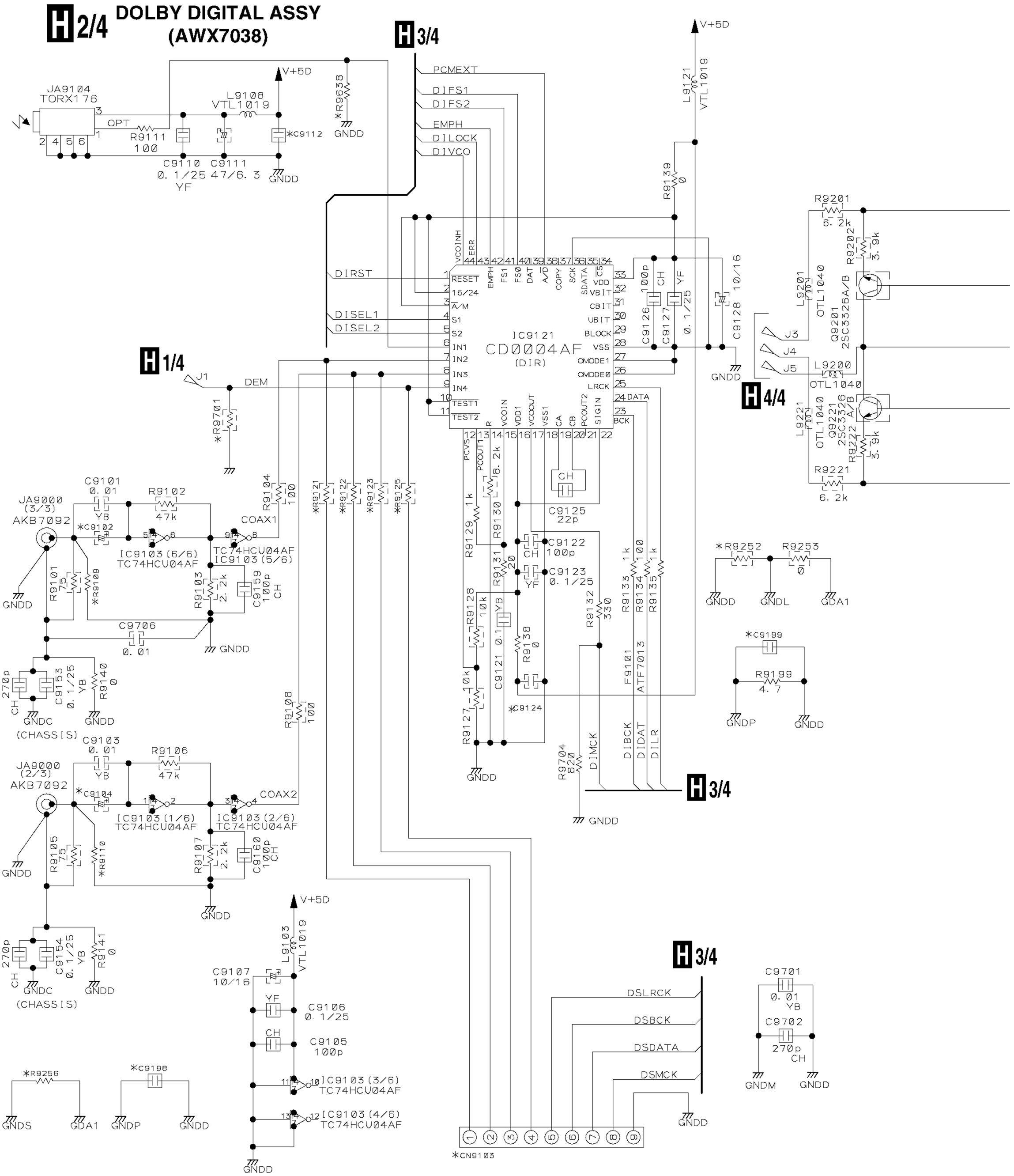
(indicated "*" mark parts are not used.)

VSA-E06

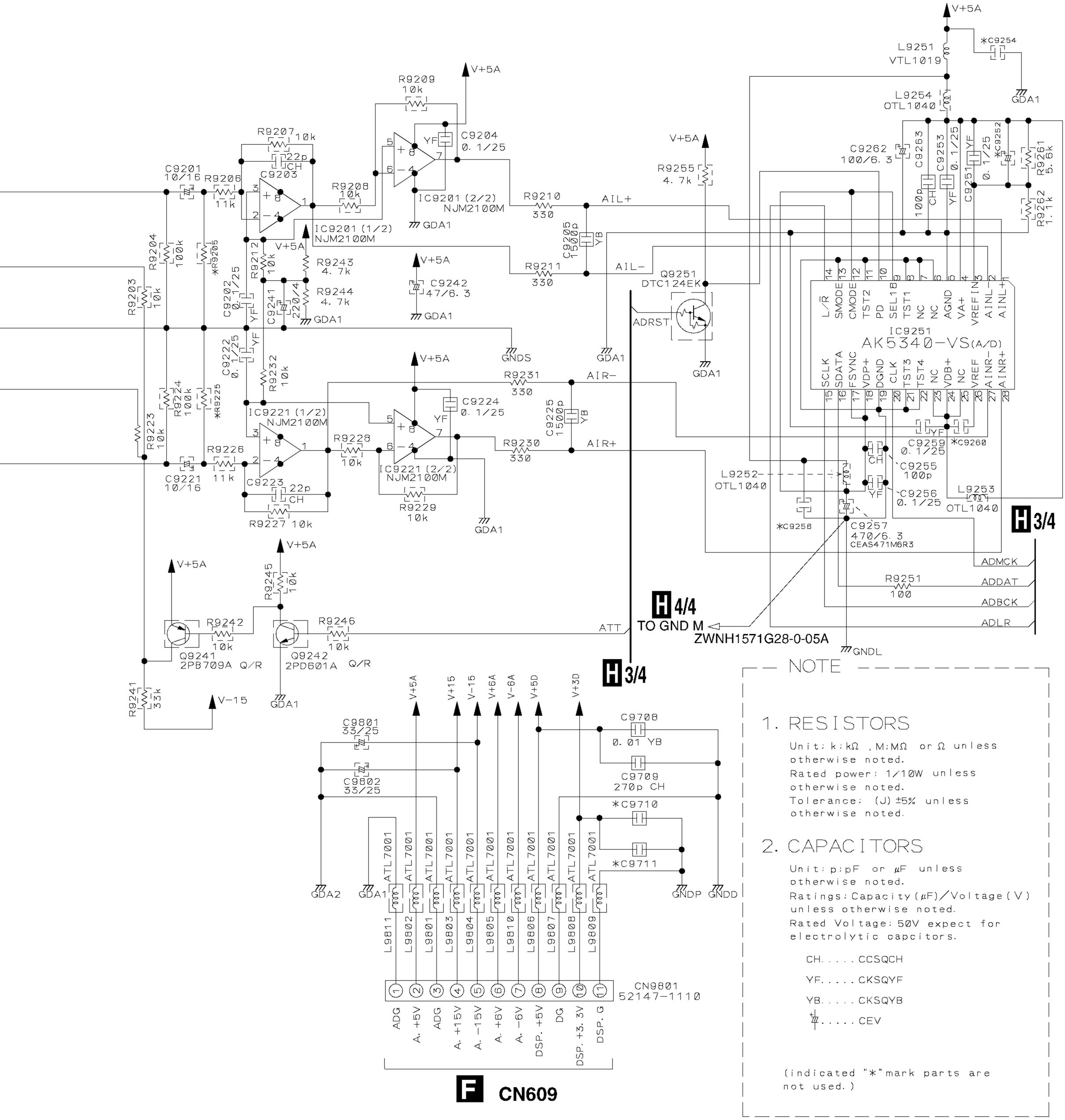

V+15
V+5D
L9005
VTL1019
L9004
VTL1019
C9016
10/35
0.1/25
YF
GDDM
D9002
1SS355
R9026
3.3k
R9018
10k
R9020
2k
C9012
0.1/25
YF
C9013
R9023
22
Q9005
2SC3802K
N/P
Q9006
2SC3802K
N/P
C9011 0.1/25
YF
R9019
5.1k
R9021
1k
C9018
0.1/25
R9029
560
C9010
0.1/25
YF
R9022
1k
R9024
3.3k
C9014
0.01
YB
R9025
1k
Q9007
2PB709A
Q/R
C9015
0.1/25
YF
GNDD
R9009
220
R9010
10k
C9008
0.1/25
YF
Q9003
2PD601A
Q/R
L9003
ATH7001
C9007
75p
CH
R9011
10k
R9015
2k
C9009
YF
0.1/25
F9001
ATF7001
R9014
1k
*R9012
R9013
1.5k
R9016
2k
R9017
1.5k
Q9004
2SC3802K
N/P
GDDM
C9042
1.0/16
YF
R9046
100k
V-15
C9058
0.1/25
YF
GDDM
R9047
8.2k
C9043
0.1/25
YF
V+1
IC9041 (1/2)
NJM4558MD
H 2/4
J1
DEM
R9074
100
C9703
0.01
YB
C9704
270p
CH
GNDD
GNDD
V+5D
C9052
0.1/25
YF
R9055
120
C9053
47/25
NP
R9056
68k
R9053
10k
R9051
39k
R9052
24k
C9051
0.1/25
YF
R9054
10k
IC9041 (2/2)
NJM4558MD
V+15
R9058
47k
C9055
0.1/25
YF
R9059
47k
R9057
47k
GNDD
GNDD
C9057
27pCH
*R9060
18.432MHz
C9056
YB
0.01
D9001
KV1851
C9054
0.01
YB
GNDD
X9001 ASS7009
GNDD
C9077
0.1/25
YF
R9061
470
C9076
0.1/25
YF
H 3/4
DM
IC9071
PM4007A
(DEMODULATOR)
IC9091
LH52256AN-70LL
C9075
0.1/25
YF
L9091
VTL1019
V+5D
C9073
YF
0.1/25
C9074
YF
0.1/25
*C9093
C9091
100/6.3
C9092
0.01
YF
GNDD
H 1/4

VSA-E06

H 2/4 DOLBY DIGITAL ASSY (AWX7038)



VSA-E06



NOTE

1. RESISTORS

Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

2. CAPACITORS

Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

CH. . . . . CCSQCH
YF. . . . . CKSQYF
YB. . . . . CKSQYB
+ . . . . . CEV

(indicated "*" mark parts are not used.)

H 2/4

H 3/4 DOLBY DIGITAL ASSY (AWX7038)

H 2/4
H 4/4

NOTE

1. RESISTORS

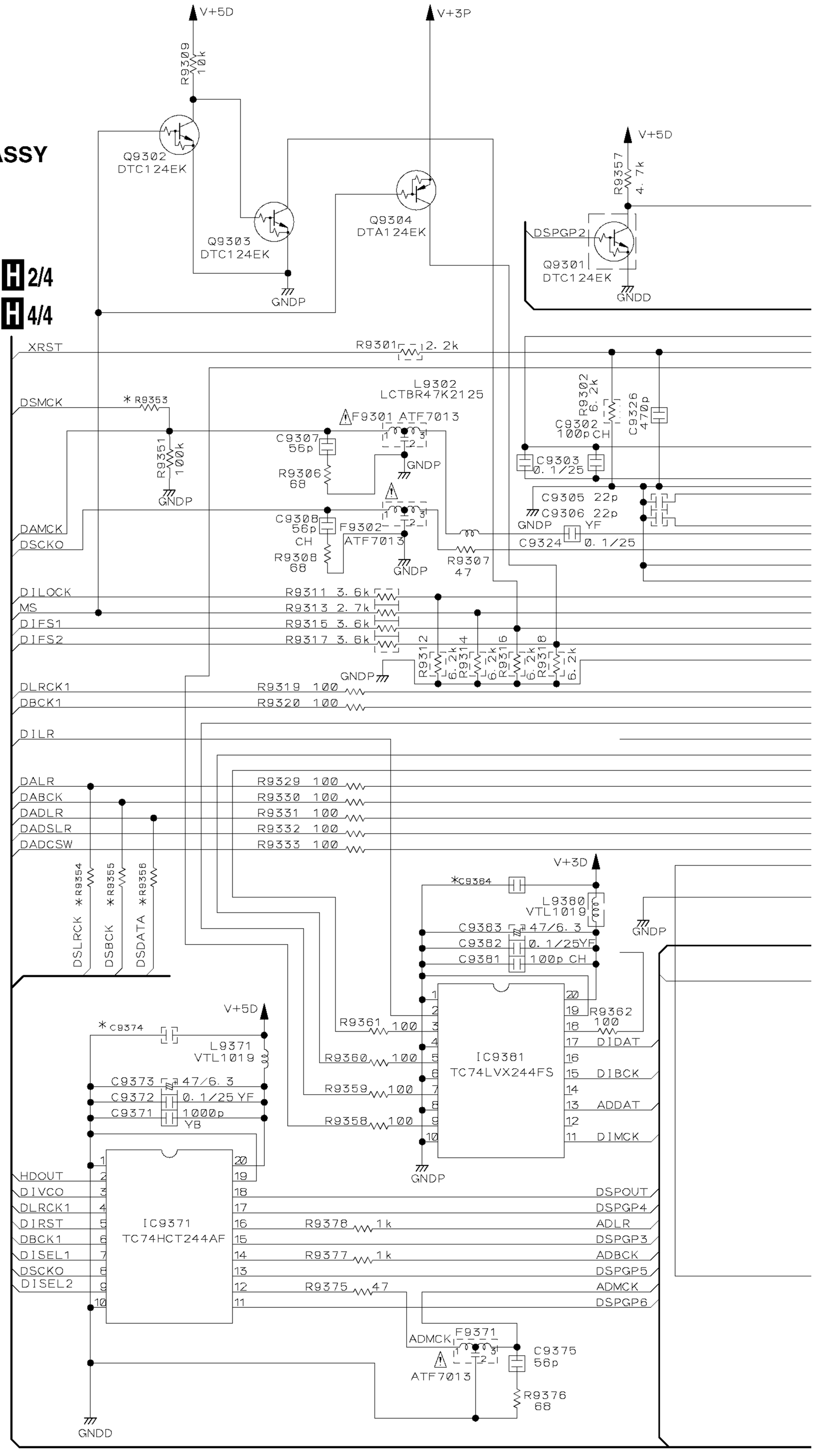
Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

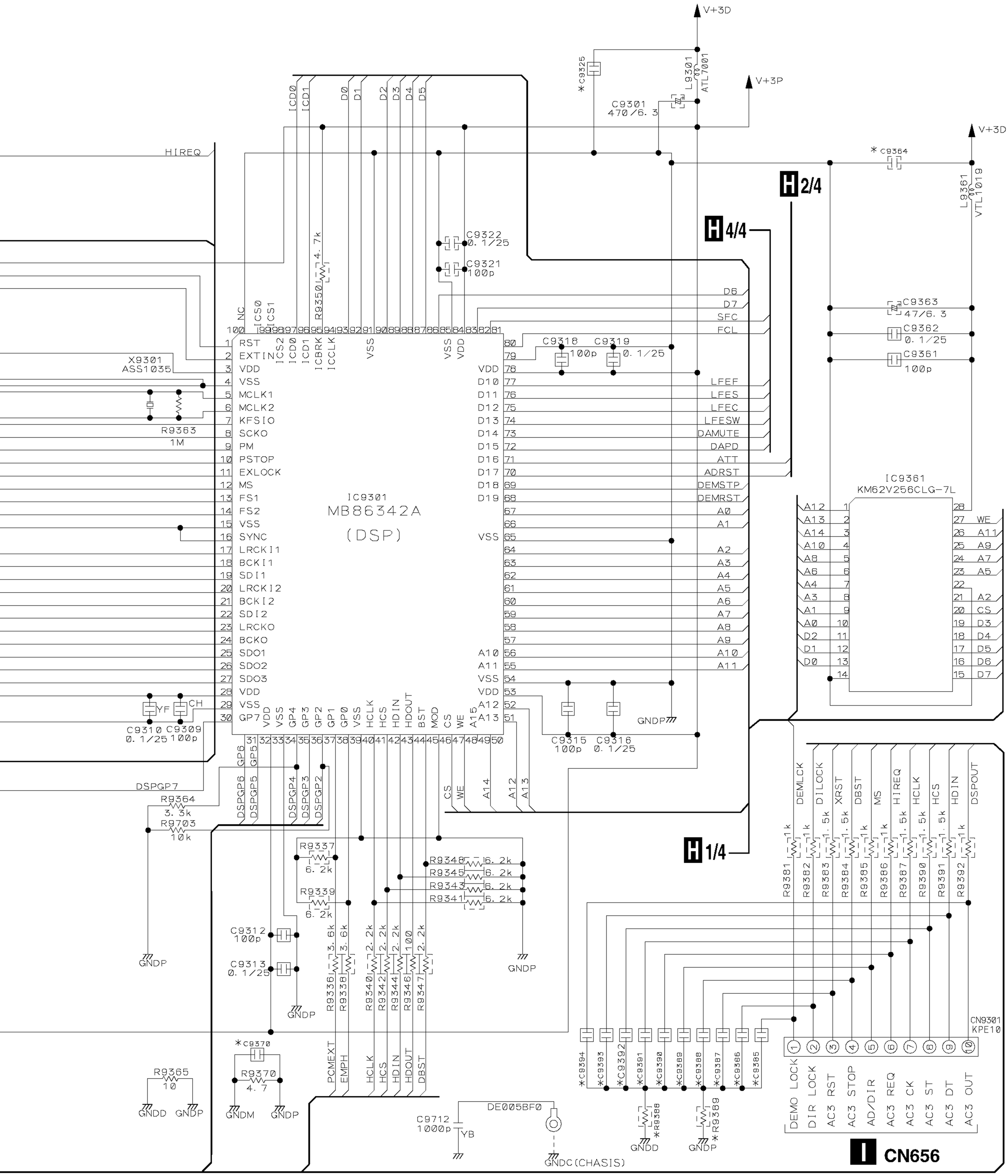
2. CAPACITORS

Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF) / Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

CH. . . . . CCSQCH
YF. . . . . CKSQYF
YB. . . . . CKSQYB
NP. . . . . CEANP
. . . . . CEV

(indicated "*" mark parts are not used.)




V+3D
V+3P
*C9325
L9301
ATL7001
C9301
470/6.3
ICD0
ICD1
D0
D1
D2
D3
D4
D5
HIREQ
R9350
4.7k
C9322
0.1/25
C9321
100p
NC
ICS0
ICS1
ICS2
ICBRK
ICCLK
VSS
VDD
C9318
100p
C9319
0.1/25
X9301
ASS1035
R9363
1M
IC9301
MB86342A
(DSP)
RST
EXTIN
VDD
VSS
MCLK1
MCLK2
KFSIO
SCKO
PM
PSTOP
EXLOCK
MS
FS1
FS2
VSS
SYNC
LRCKI1
BCKI1
SDI1
LRCKI2
BCKI2
SDI2
LRCKO
BCKO
SDO1
SDO2
SDO3
VDD
VSS
GP7
GP6
GP5
GP4
GP3
GP2
GP1
GP0
HCLK
HCS
HDIN
HDOUT
BST
MOD
CS
WE
A15
A14
A12
A13
D6
D7
SFC
FCL
LFEF
LFES
LFEC
LFESW
DAMUTE
DAPD
ATT
ADRST
DEMSTP
DEMRST
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
H 2/4
H 4/4
H 1/4
H 3/4
*C9364
L9361
VTL1019
C9363
47/6.3
C9362
0.1/25
C9361
100p
IC9361
KM62V256CLG-7L
A12
A13
A14
A10
A8
A6
A4
A3
A1
A0
D2
D1
D0
WE
A11
A9
A7
A5
A2
CS
D3
D4
D5
D6
D7
YF
CH
C9310
0.1/25
C9309
100p
C9315
100p
C9316
0.1/25
GNDP
DSPGP7
R9364
3.3k
R9703
10k
DSPGP6
DSPGP5
DSPGP4
DSPGP3
DSPGP2
R9337
6.2k
R9339
6.2k
R9348
6.2k
R9345
6.2k
R9343
6.2k
R9341
6.2k
C9312
100p
C9313
0.1/25
R9336
3.6k
R9338
3.6k
R9340
2.2k
R9342
2.2k
R9344
2.2k
R9346
100
R9347
2.2k
PCMEXT
EMPH
HCLK
HCS
HDIN
HDOUT
DBST
R9365
10
GNDD
*C9370
R9370
4.7
GNDM
C9712
1000p
YB
DE005BF0
GNDC(CHASIS)
R9381
R9382
R9383
R9384
R9385
R9386
R9387
R9390
R9391
R9392
1k
1.5k
DEMLCK
DILOCK
XRST
DBST
MS
HIREQ
HCLK
HCS
HDIN
DSPOUT
*C9394
*C9393
*C9392
*C9391
*C9390
*C9389
*C9388
*C9387
*C9386
*C9385
*R9388
*R9389
CN9301
KPE10
DEMO LOCK
DIR LOCK
AC3 RST
AC3 STOP
AD/DIR
AC3 REQ
AC3 CK
AC3 ST
AC3 DT
AC3 OUT
CN656

VSA-E06

H 4/4
DOLBY DIGITAL ASSY
(AWX7038)

H 3/4

H 2/4
TO GND L
ZWNH1571G28-0-05A

IC9401
AK4319-VM
(D/A)

IC9431
AK4319-VM
(D/A)

IC9461
AK4319-VM
(D/A)

IC9411 (1/2)
NJM4558MD

IC9411 (2/2)
NJM4558MD

IC9441 (1/2)
NJM4558MD

IC9441 (2/2)
NJM4558MD

IC9471 (1/2)
NJM4558MD

IC9471 (2/2)
NJM4558MD

R9408 2PD601A Q/R
27k Q9402
V+5A
R9608 39k
V+15
C9601 Ø.1/25 YF
V-15 C9602 10/16 R9601 3.3k
(F)
GDA2
C9605 10/16 R9606 100
L9601 OTL1040
Q9601 2SC3326 A/B
R9607 4.7k
C9606 1000p CH
C9603 390p CH
IC9601 (1/2) NJM4558MD
R9602 33k
R9603 11k
R9604 22k
*C9604
R9605 100k
GNDS
*C9614
R9613 11k
R9614 22k
R9612 33k
C9613 390p CH
IC9601 (2/2) NJM4558MD
R9615 100k
R9617 4.7k
Q9611 2SC3326 A/B
C9616 1000p CH
C9612 10/16 R9611 3.3k
C9615 10/16 R9616 100
L9611 OTL1040
C9611 Ø.1/25 YF
V-15
GDA2

NOTE

1. RESISTORS

Unit: k:kΩ , M:MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

2. CAPACITORS

Unit: p:pF or μF unless otherwise noted.
Ratings: Capacity (μF)/Voltage (V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

CH.....CCSQCH
YF.....CKSQYF
YB.....CKSQYB
NP.....CEANP
.....CEV

(indicated "*" mark parts are not used.)

H 3/4

IC9501 PA4025A
DAMUTE
LFESW
LFEC
LFES
LFEF
V+6A
C9502 10/16
C9503 0.1/25
YF
C9501 0.1/25
FCL
SFC
C9504 10/16
15 SWIN− 16 SWIN+ 17 CIN+ 18 CIN− 19 RSIN− 20 RSIN+ 21 LSIN+ 22 LSIN− 23 GND 24 VEE 25 RIN− 26 RIN+ 27 LIN+ 28 LIN−
MUTE 14 LFESW 13 LFEC 12 LFES 11 LFEF 10 VCC 9 FCL 8 SFC 7 SWOUT 6 COUT 5 RSOUT 4 LSOUT 3 ROUT 2 LOUT 1
GNDS
GDA2
(SL)

V+15
C9621 0.1/25 YF
C9622 10/16 R9621 3.3k
(SL)
GDA2
C9625 10/16 R9626 100
L9621 OTL1040
Q9621 2SC3326 A/B
R9627 4.7k
CH C9626 1000p
IC9621 (1/2) NJM4558MD
R9622 33k
C9623 390p CH
R9623 16k
R9624 56k
*C9624
R9625 100k
GNDS
*C9634
R9633 16k
R9634 56k
R9632 33k
C9633 390p CH
IC9621 (2/2) NJM4558MD
R9635 100k
R9637 4.7k
Q9631 2SC3326 A/B
CH C9636 1000p
C9635 10/16 R9636 100
L9631 OTL1040
C9632 10/16 R9631 3.3k
V-15
C9631 0.1/25 YF
GDA2
(F)
(SL)

V+15
C9641 0.1/25 YF
(C)
C9642 10/16 R9641 3.3k
(C)
GDA2
C9645 10/16 R9646 100
L9641 OTL1040
(C)
Q9641 2SC3326 A/B
R9647 4.7k
C9646 1000p CH
IC9641 (1/2) NJM4558MD
R9642 33k
C9643 390p CH
R9643 11k
R9644 22k
*C9644
R9645 100k
(SW)
GNDS
*C9654
R9653 11k
R9654 22k
R9652 33k
C9653 0.039 YB
IC9641 (2/2) NJM4558MD
R9655 100k
R9657 4.7k
Q9651 2SC3326 A/B
C9656 1000p CH
L9661 VTL1019
GNDS
C9652 10/16 R9651 1.2k
(SW)
C9655 10/16 R9656 100
(SW)
L9651 OTL1040
V-15
C9651 0.1/25 YF
GDA2

H 2/4

J4
J5
J3
(SW)
(C)
(SL)
(F)

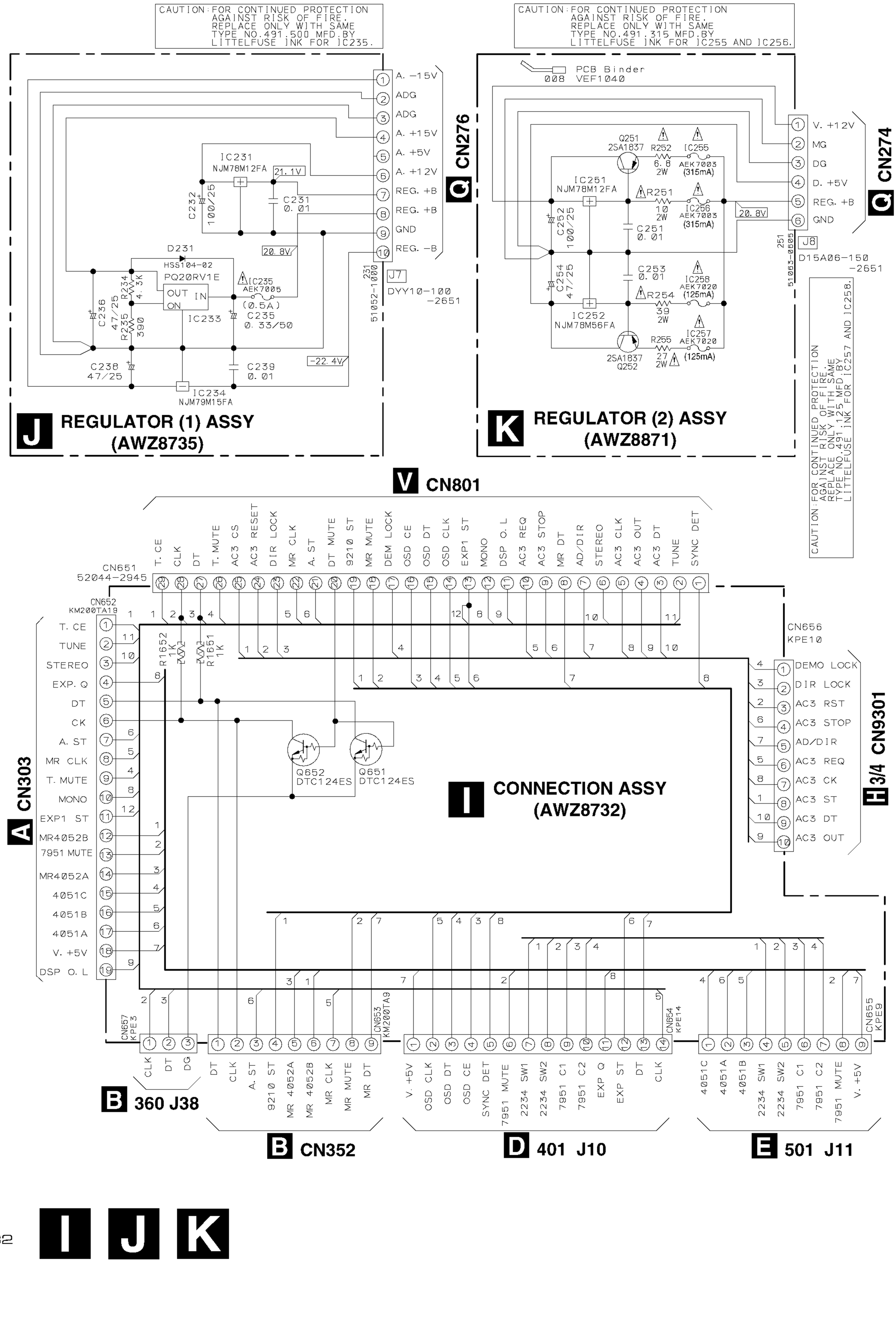
CN9661 52147-1510
15 SW 14 G(AG) 13 C 12 G(AG) 11 SR 10 G(AG) 9 SL 8 G(AG) 7 FR 6 G(AG) 5 FL 4 G(AG) 3 R 2 G(AG) 1 L

F CN608

: AUDIO SIGNAL ROUTE
(F) : AUDIO SIGNAL ROUTE (FRONT)
(SL) : AUDIO SIGNAL ROUTE (REAR)
(C) : AUDIO SIGNAL ROUTE (CENTER)
(SW) : AUDIO SIGNAL ROUTE (SW)

H 4/4

3.9 CONNECTION ASSY, REGULATOR(1) ASSY, REGULATOR(2) ASSY, REGULATOR(3) ASSY AND V-AMP ASSY



I J K

NOTED

1. RESISTORS

   Indicated in ohm 1/4W ±5% tolerance unless otherwise noted K:Kohm, M:Mohm

   Chip Resistor

   Ⓕ RFA

2. CAPACITORS

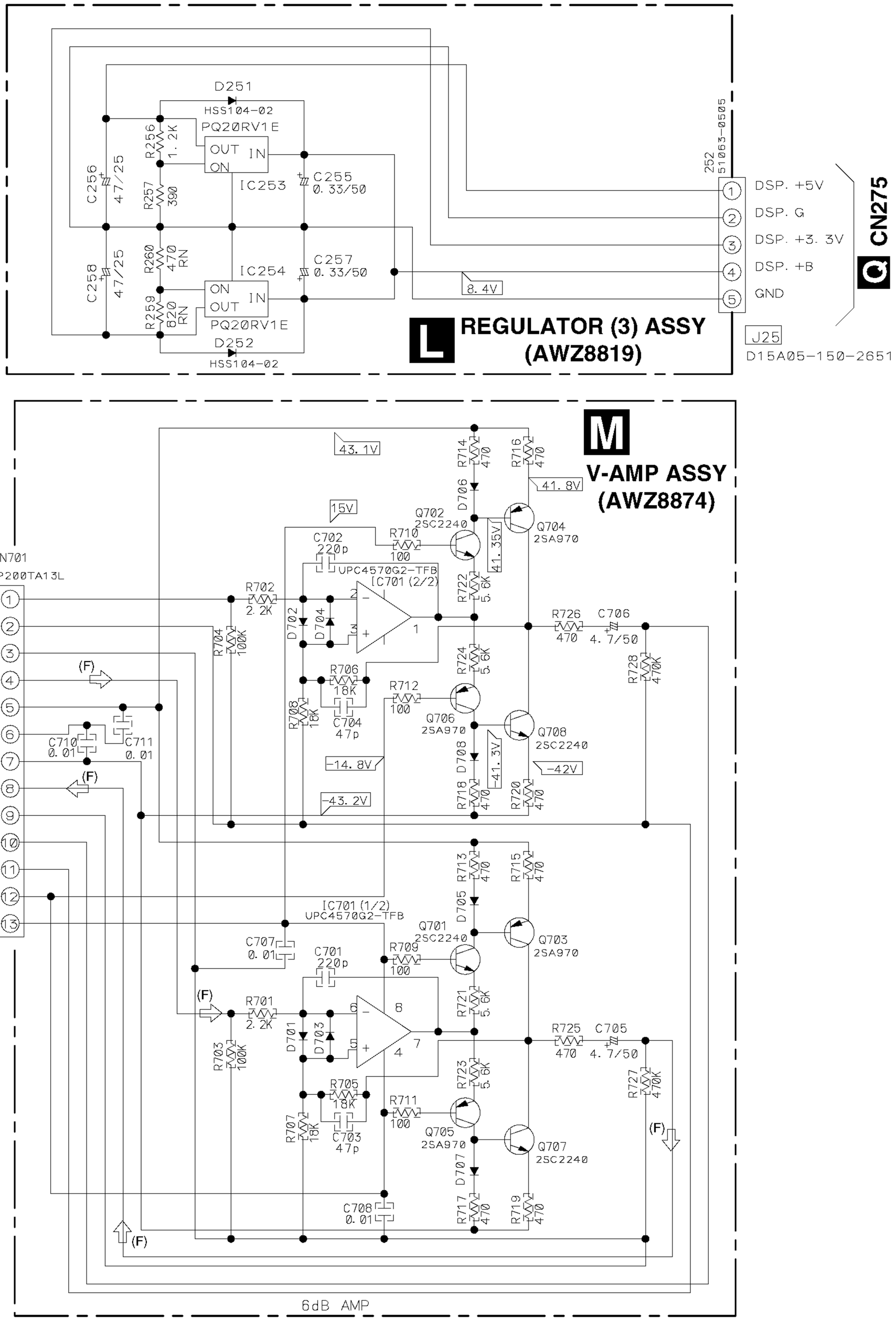
   Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF

   Indication without voltage is 50V except electrolytic capacitor

   Chip Capacitor

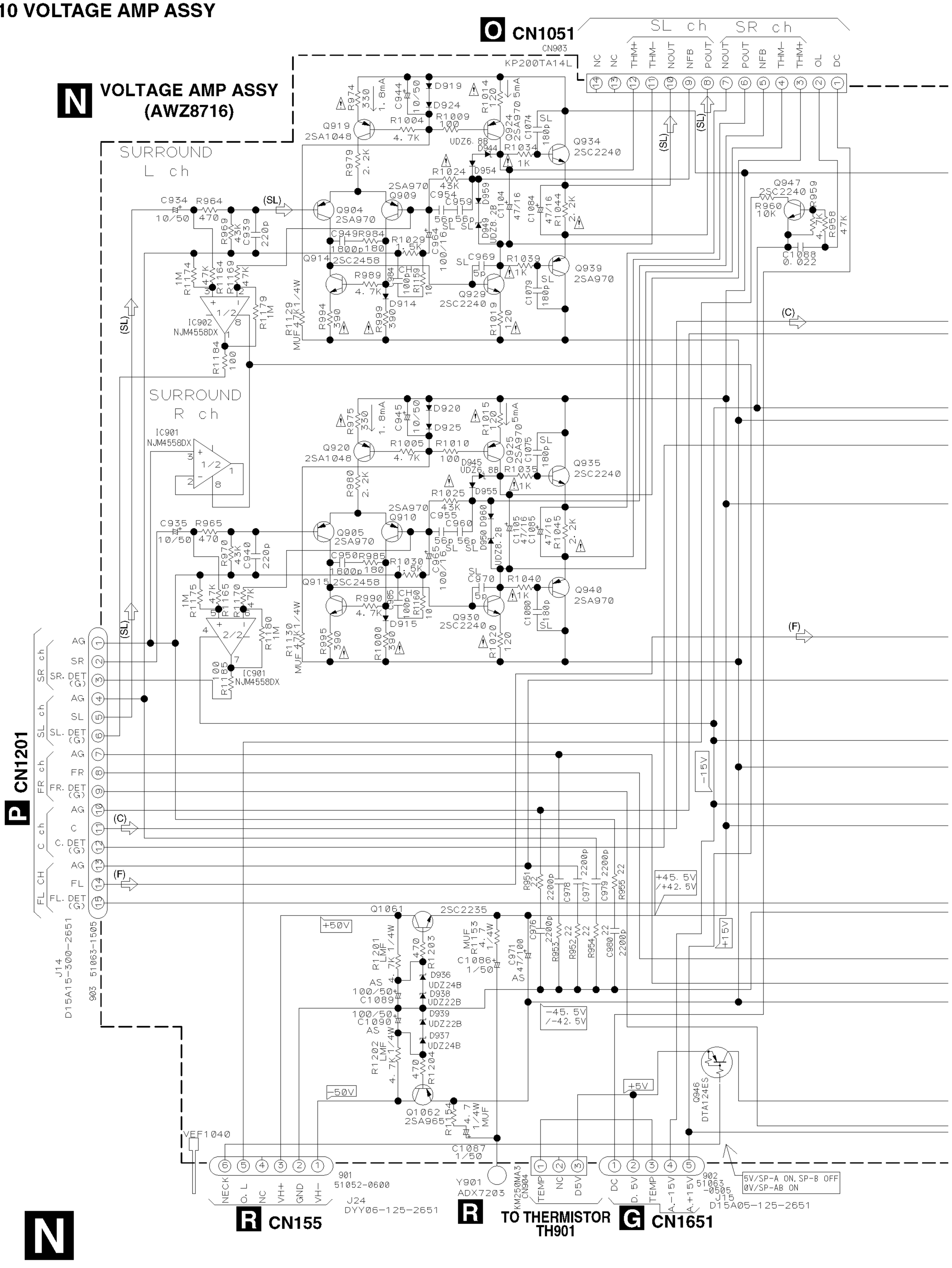
3. DIODE

   Diode without indicated is 1SS355-TRB



(F) ⇨ : AUDIO SIGNAL ROUTE (FRONT)

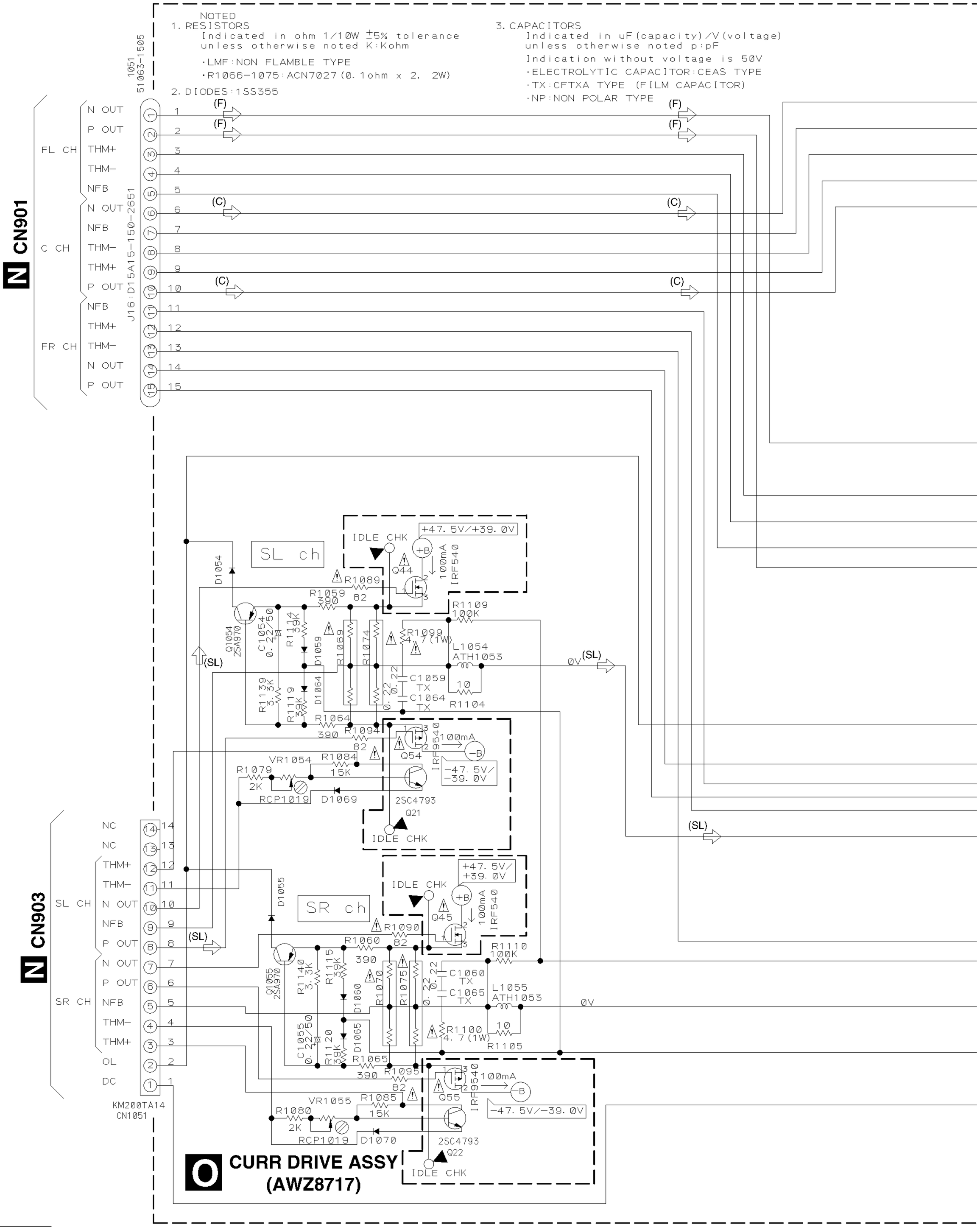
3.10 VOLTAGE AMP ASSY

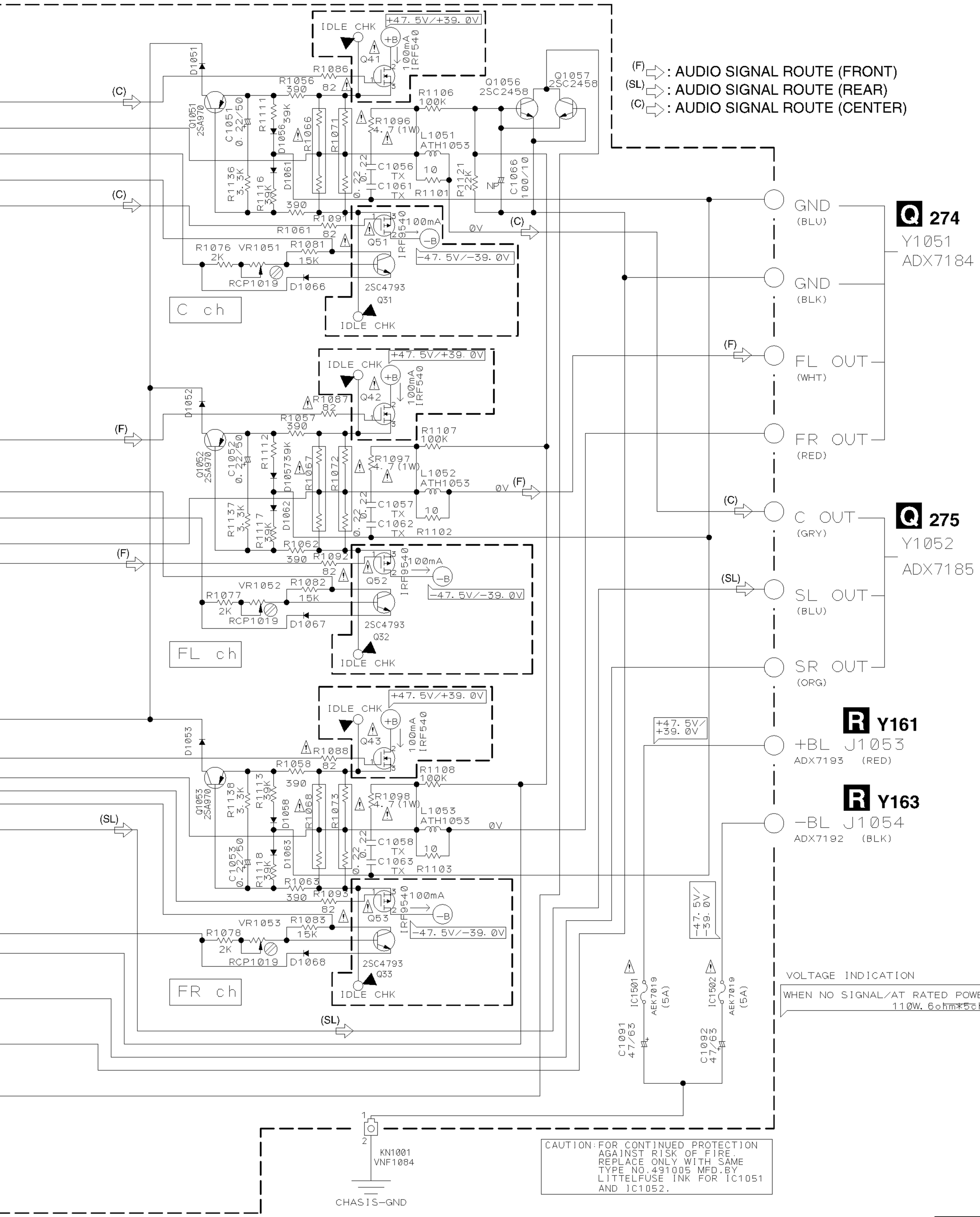


NOTED
1. RESISTORS
Indicated in ohm 1/10W 5% tolerance unless otherwise noted K:Kohm
·LMF:NON FLAMBLE TYPE
2. CAPACITORS
Indicated in uF(capacity)/V(voltage) unless otherwise noted p:pF
Indication without voltage is 50V
·NO MARK NON ELECTOLYTIC CAPACITOR:CKSQYB TYPE ·CH:CCSQCH TYPE
·NO MARK ELECTROLYTIC CAPACITOR:CEJA TYPE ·AS:CEAS TYPE
·SL:CCCSL (500V) TYPE ·YF:CKSQYF TYPE
3. DIODES:1SS355

(F) ⇨ : AUDIO SIGNAL ROUTE (FRONT)
(SL) ⇨ : AUDIO SIGNAL ROUTE (REAR)
(C) ⇨ : AUDIO SIGNAL ROUTE (CENTER)

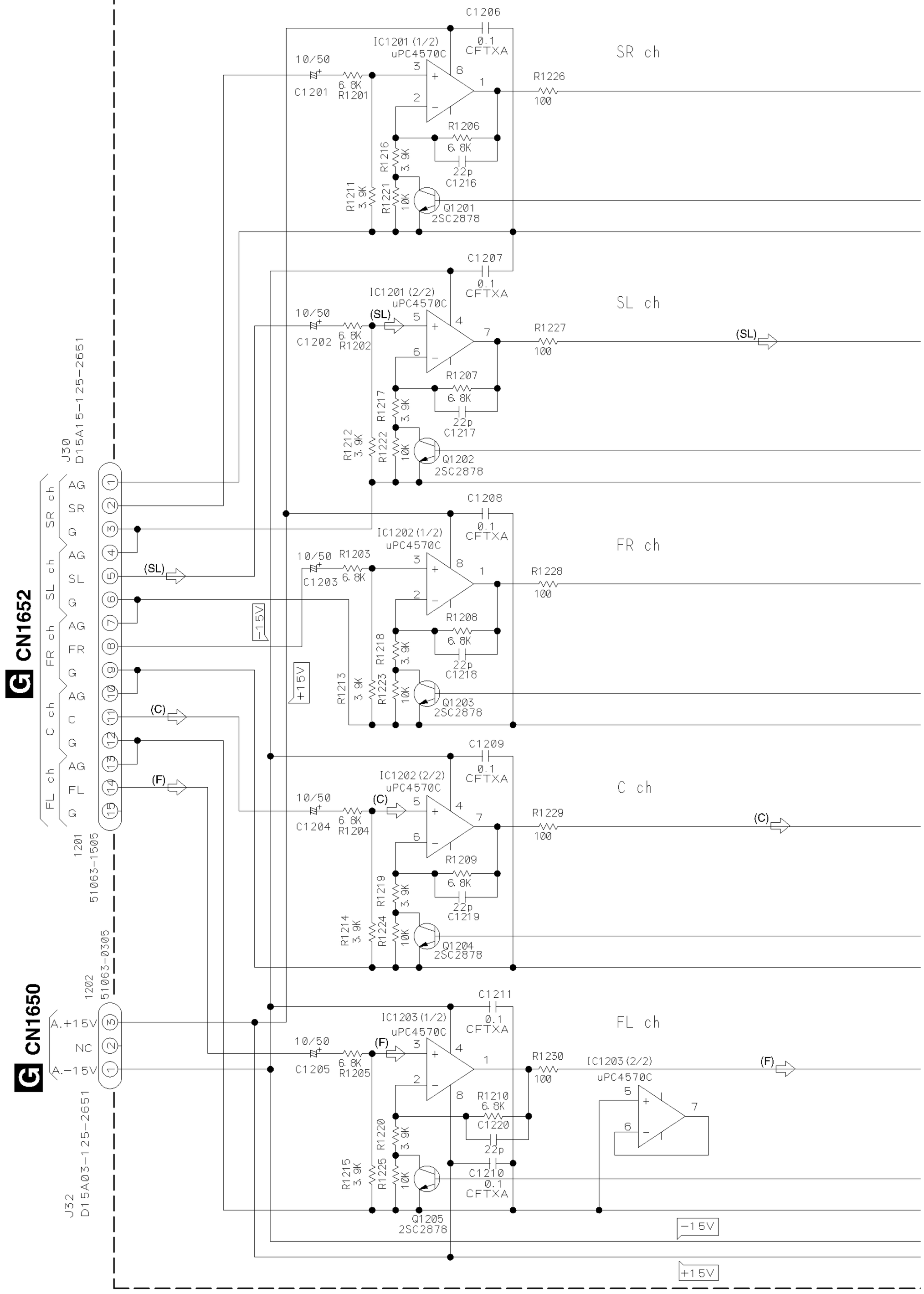
3.11 CURR DRIVE ASSY




(F) : AUDIO SIGNAL ROUTE (FRONT)
(SL) : AUDIO SIGNAL ROUTE (REAR)
(C) : AUDIO SIGNAL ROUTE (CENTER)
C ch
FL ch
FR ch
IDLE CHK
+47.5V/+39.0V
-47.5V/-39.0V
0V
100mA
IRF540
2SC4793
Q41
Q42
Q43
Q51
Q52
Q53
Q31
Q32
Q33
Q1051 2SA970
Q1052 2SA970
Q1053 2SA970
Q1056 2SC2458
Q1057 2SC2458
D1051
D1052
D1053
D1061
D1062
D1063
D1066
D1067
D1068
D105739K
D1058
R1086
R1087
R1088
R1056 390
R1057 390
R1058 390
R1061 82
R1062 390
R1063 390
R1066
R1067
R1068
R1071
R1072
R1073
R1076 2K
R1077 2K
R1078 2K
R1081 15K
R1082 15K
R1083 15K
R1091 82
R1092 82
R1093 82
R1096 4.7(1W)
R1097 4.7(1W)
R1098 4.7(1W)
R1101 10
R1102 10
R1103 10
R1106 100K
R1107 100K
R1108 100K
R1111 39K
R1112 39K
R1113 39K
R1116 39K
R1117 39K
R1118 39K
R1121 22K
R1136 3.3K
R1137 3.3K
R1138 3.3K
VR1051
VR1052
VR1053
RCP1019
C1051 0.22/50
C1052 0.22/50
C1053 0.22/50
C1056 0.22 TX
C1057 0.22 TX
C1058 0.22 TX
C1061 0.22 TX
C1062 0.22 TX
C1063 0.22 TX
C1066 100/10 NP
L1051 ATH1053
L1052 ATH1053
L1053 ATH1053
GND (BLU)
GND (BLK)
FL OUT (WHT)
FR OUT (RED)
C OUT (GRY)
SL OUT (BLU)
SR OUT (ORG)
Q 274
Y1051
ADX7184
Q 275
Y1052
ADX7185
R Y161
+BL J1053
ADX7193 (RED)
R Y163
-BL J1054
ADX7192 (BLK)
+47.5V/+39.0V
-47.5V/-39.0V
IC1501 AEK7019 (5A)
IC1502 AEK7019 (5A)
C1091 47/63
C1092 47/63
VOLTAGE INDICATION
WHEN NO SIGNAL/AT RATED POWER
110W. 6ohm*5ch
KN1001
VNF1084
CHASIS-GND
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO.491005 MFD.BY LITTELFUSE INK FOR IC1051 AND IC1052.

3.12 LIMITTER ASSY

P LIMITTER ASSY (AWK7406)



(F) ⇨ : AUDIO SIGNAL ROUTE (FRONT)
(SL) ⇨ : AUDIO SIGNAL ROUTE (REAR)
(C) ⇨ : AUDIO SIGNAL ROUTE (CENTER)

- NO MARK DIODE : HSS104-02-T
- RESISTOR : 1/4W, J%
- NO MARK ELECTROLYTIC CAPACITOR : CEAS
  JA : CEJA
- NON ELECTROLYTICAL CAPACITOR : CCCCH TYPE

R1231 330K
C1221
22p
330K
R1236
NJM4558DX
IC1204 (1/2)
R1251
10K
330K
R1241
C1231
4. 7/35
JA
1K
R1256
D1201
D1206
HZS2CLL
D1211
R1261
47K
HZS2CLL
D1216
NJM4558DX
IC1204 (2/2)
47K
R1266

(SL)

R1232 330K
C1222
22p
330K
R1237
NJM2058D
IC1205 (1/4)
R1252
10K
330K
R1242
C1232
4. 7/35
JA
1K
R1257
D1202
D1207
HZS2CLL
D1212
R1262
47K
HZS2CLL
D1217
NJM2058D
IC1205 (2/4)
47K
R1267

R1233 330K
C1223
22p
330K
R1238
NJM2058D
IC1205 (3/4)
R1253
10K
330K
R1243
C1233
4. 7/35
JA
1K
R1258
D1203
D1208
HZS2CLL
D1213
R1263
47K
HZS2CLL
D1218
NJM2058D
IC1205 (4/4)
47K
R1268

(C)

R1234 330K
C1224
22p
330K
R1239
NJM2058D
IC1206 (1/4)
R1254
10K
330K
R1244
C1234
4. 7/35
JA
1K
R1259
D1204
D1209
HZS2CLL
D1214
R1264
47K
HZS2CLL
D1219
NJM2058D
IC1206 (2/4)
47K
R1269

(F)

R1235 330K
C1225
22p
330K
R1240
NJM2058D
IC1206 (3/4)
R1271
910K
R1255
10K
330K
R1245
C1235
4. 7/35
JA
1K
R1260
D1205
D1210
HZS2CLL
D1215
R1265
47K
HZS2CLL
D1220
NJM2058D
IC1206 (4/4)
47K
R1270

KPE15
CN1201

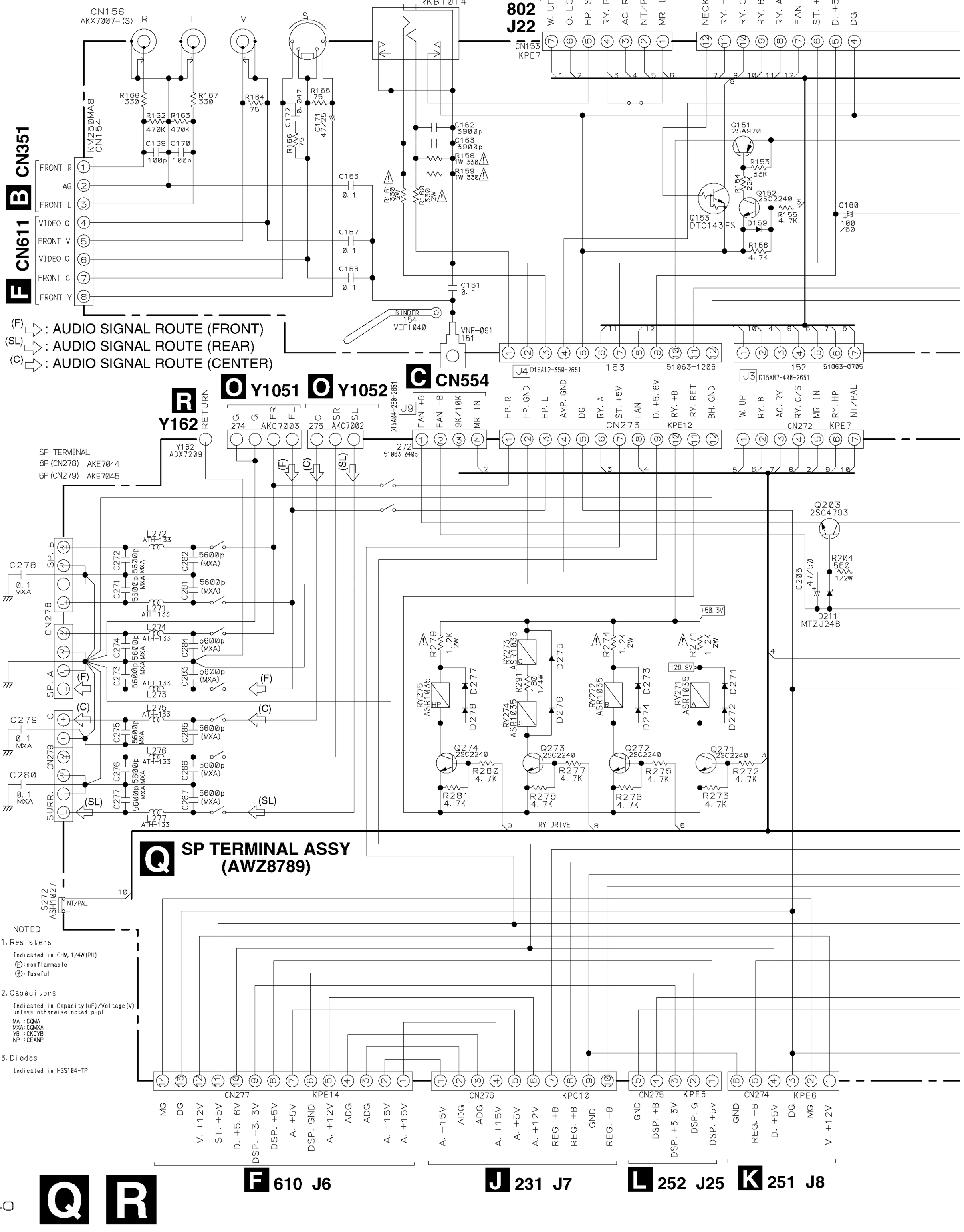
1	AG	
2	SR	SR ch
3	SR DET	
4	AG	
5	SL	SL ch
6	SL DET	
7	AG	
8	FR	FR ch
9	FR DET	
10	AG	
11	C	C ch
12	C DET	
13	AG	
14	FL	FL ch
15	FL DET	

(SL) (C) (F)

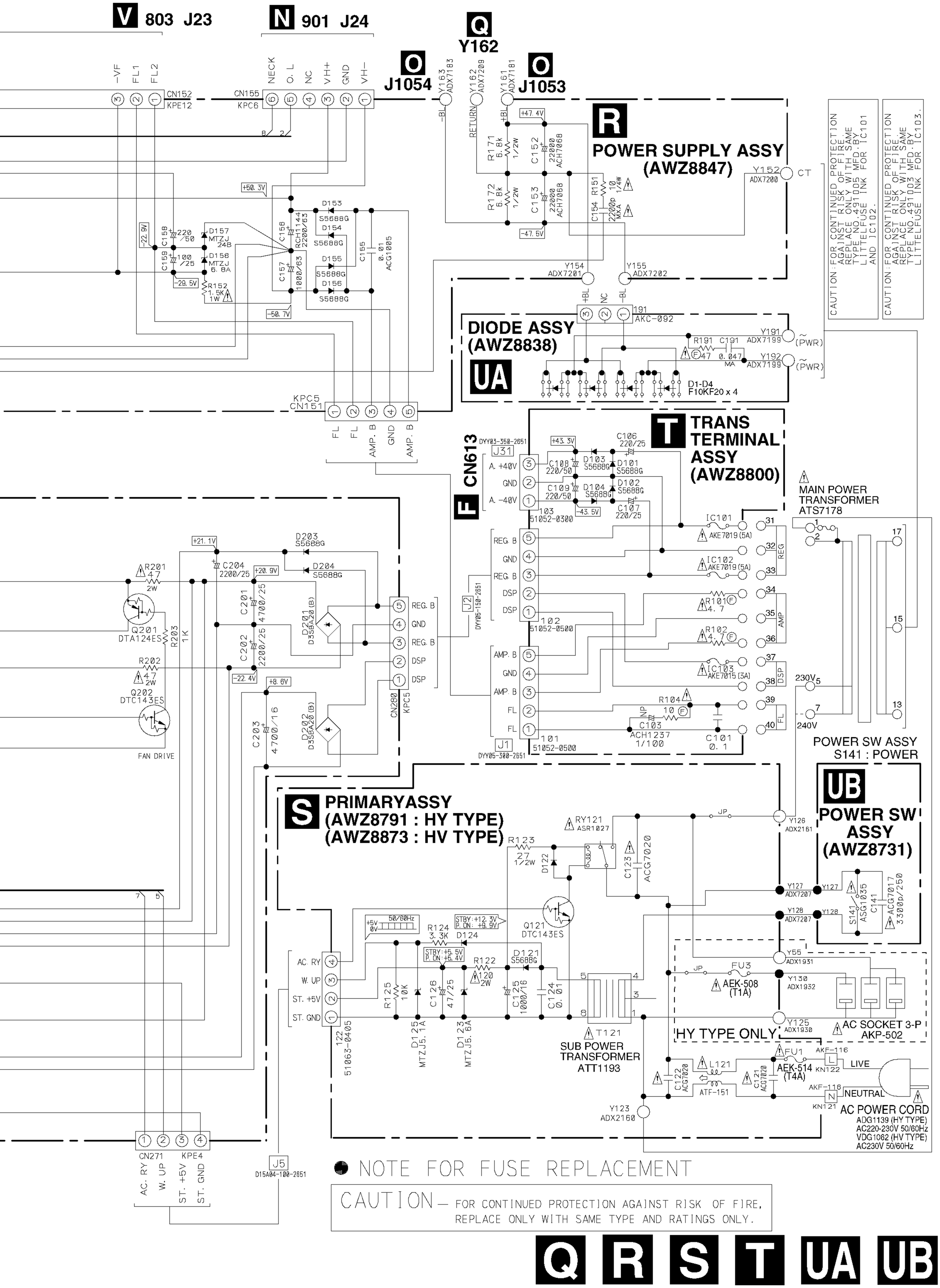
N 903 J14

VSA-E06

3.13 SP TERMINAL ASSY, POWER SUPPLY ASSY, PRIMARY ASSY, TRANS TERMINAL ASSY, DIODE ASSY AND POWER SW ASSY



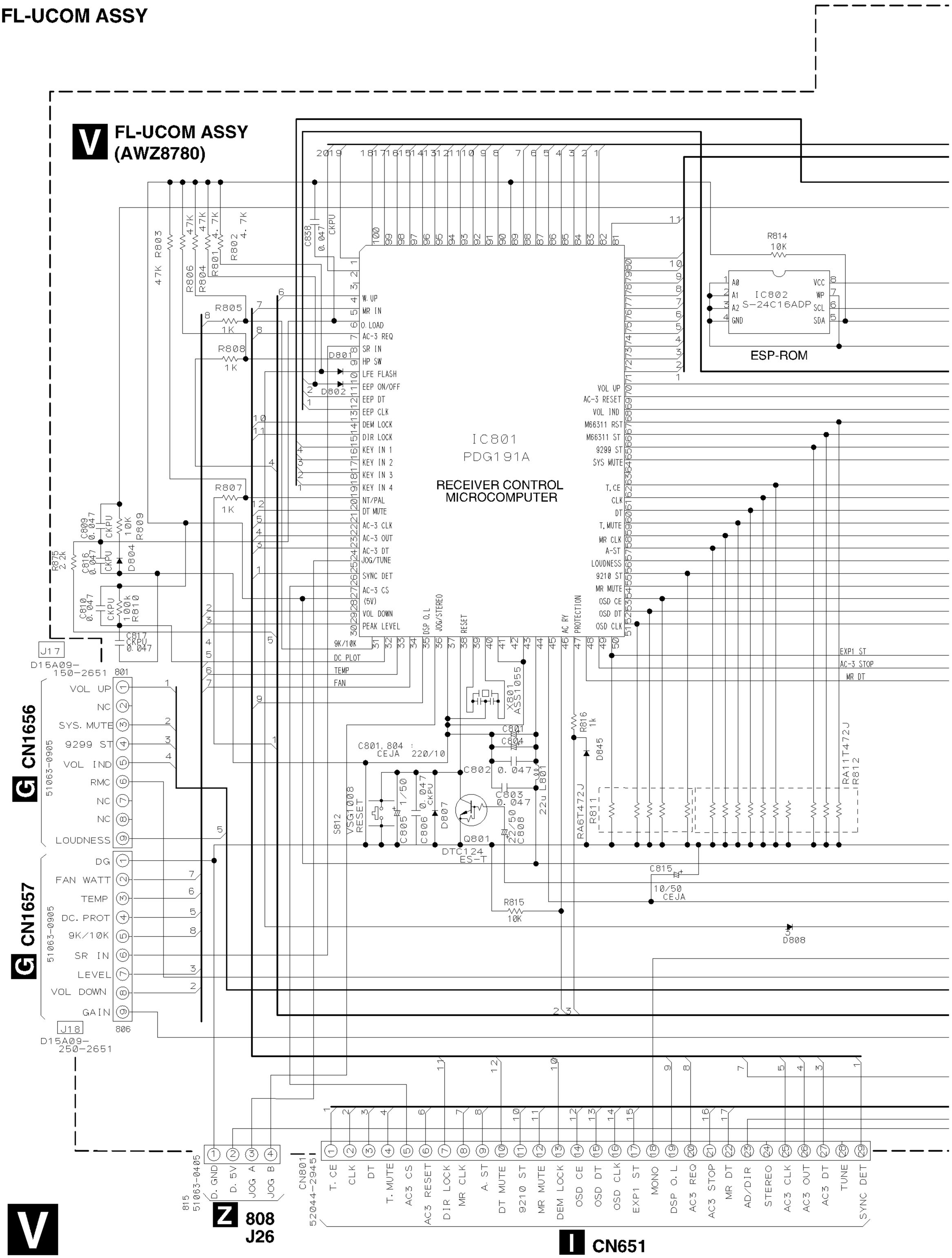
Q R

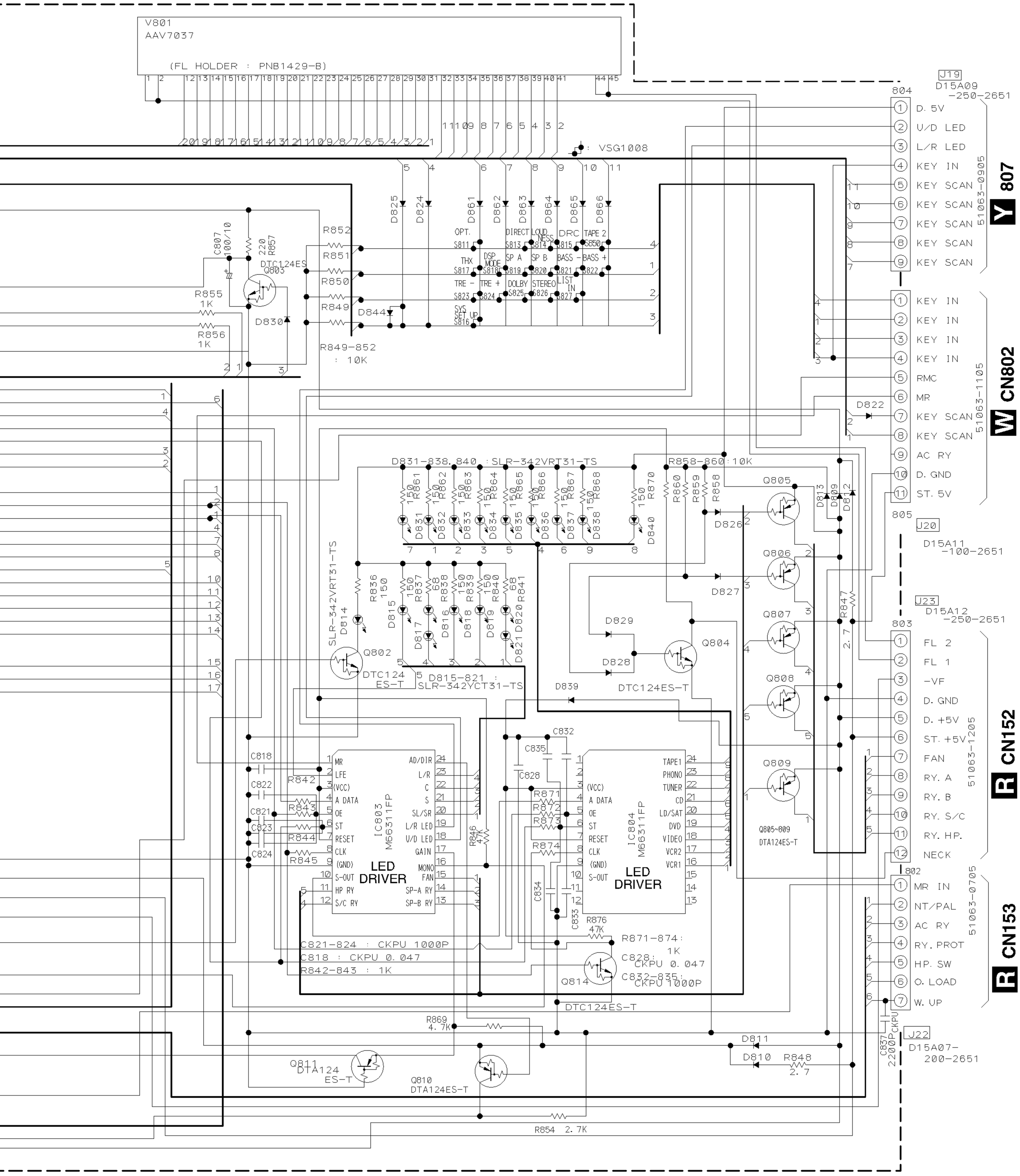

V 803 J23
N 901 J24
Q Y162
O J1054
O J1053
R POWER SUPPLY ASSY (AWZ8847)
DIODE ASSY (AWZ8838)
UA
T TRANS TERMINAL ASSY (AWZ8800)
F CN613
S PRIMARYASSY (AWZ8791 : HY TYPE) (AWZ8873 : HV TYPE)
UB POWER SW ASSY (AWZ8731)
MAIN POWER TRANSFORMER ATS7178
POWER SW ASSY S141 : POWER
SUB POWER TRANSFORMER ATT1193
HY TYPE ONLY
AC POWER CORD
ADG1139 (HY TYPE) AC220-230V 50/60Hz
VDG1062 (HV TYPE) AC230V 50/60Hz
FAN DRIVE
CAUTION:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO.491005 MFD.BY LITTELFUSE INK FOR IC101 AND IC102.
CAUTION:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO.491003 MFD.BY LITTELFUSE INK FOR IC103.

● NOTE FOR FUSE REPLACEMENT

CAUTION— FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

3.14 FL-UCOM ASSY





NOTED

1. RESISTORS
Indicated in ohm 1/4w ±5% tolerance unless otherwise noted K:Kohm, M:Mohm

2. CAPACITORS
Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF
Indication without voltage is 50V except electrolytic capacitor

3. DIODE
→| : HSS104-02-

FL U-COM ASSY

S811 : OPTICAL	S817 : THX	S823 : TRE—
S812 : RESET	S818 : DSP MODE	S824 : TRE+
S813 : DIRECT	S819 : SP A	S825 : DOLBY
S814 : LOUDNESS	S820 : SP B	S826 : STEREO
S815 : DRC	S821 : BASS—	S827 : LIST IN
S816 : SYS SET UP	S822 : BASS+	S850 : TAPE2

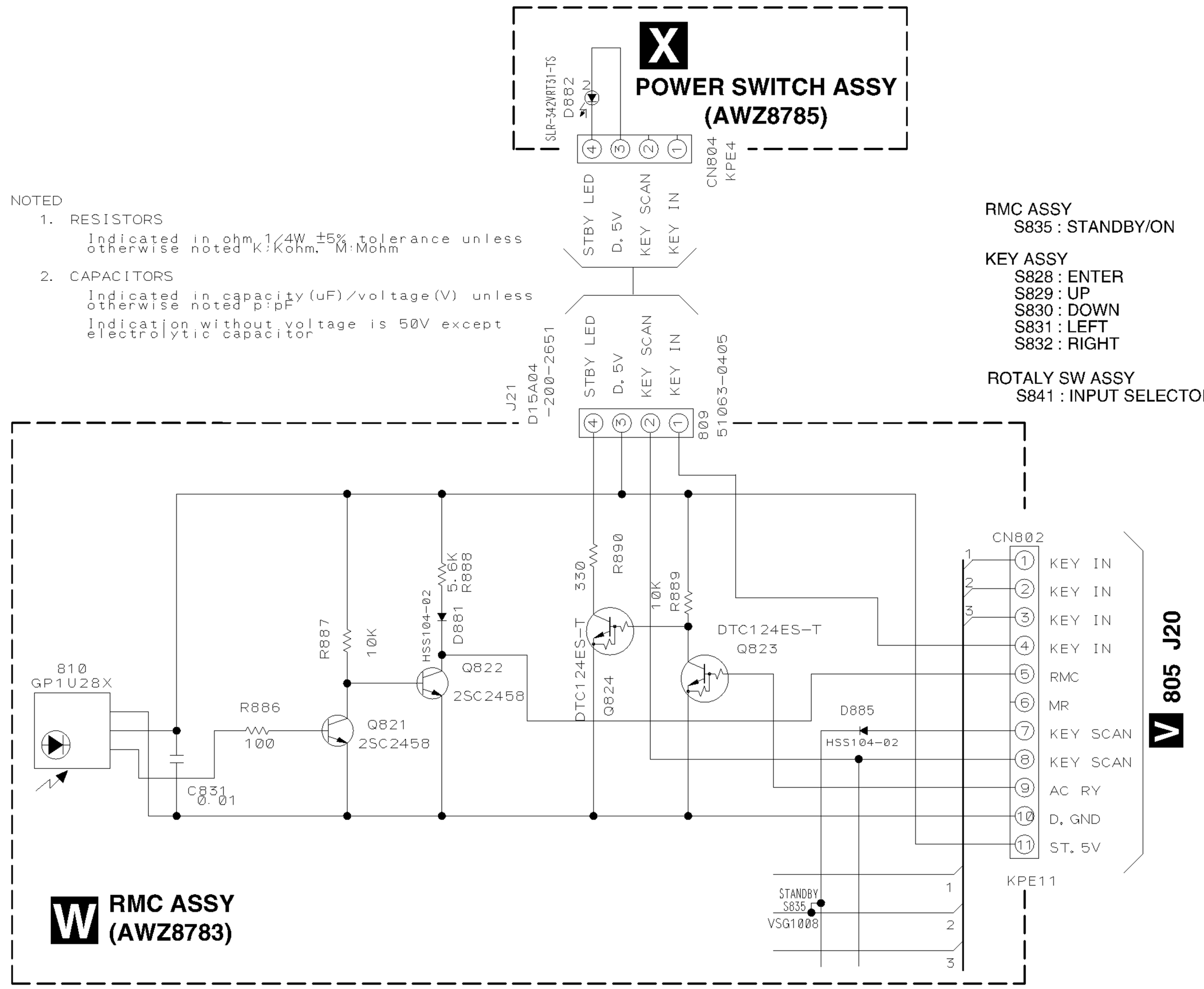
3.15 RMC ASSY, POWER SWITCH ASSY, KEY ASSY AND ROTALY SW ASSY

NOTED
1. RESISTORS
   Indicated in ohm 1/4W ±5% tolerance unless otherwise noted K:Kohm, M:Mohm
2. CAPACITORS
   Indicated in capacity(uF)/voltage(V) unless otherwise noted p:pF
   Indication without voltage is 50V except electrolytic capacitor

RMC ASSY
S835 : STANDBY/ON

KEY ASSY
S828 : ENTER
S829 : UP
S830 : DOWN
S831 : LEFT
S832 : RIGHT

ROTALY SW ASSY
S841 : INPUT SELECTOR



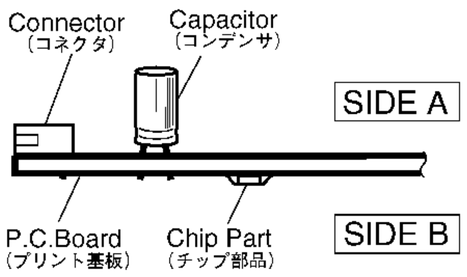
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

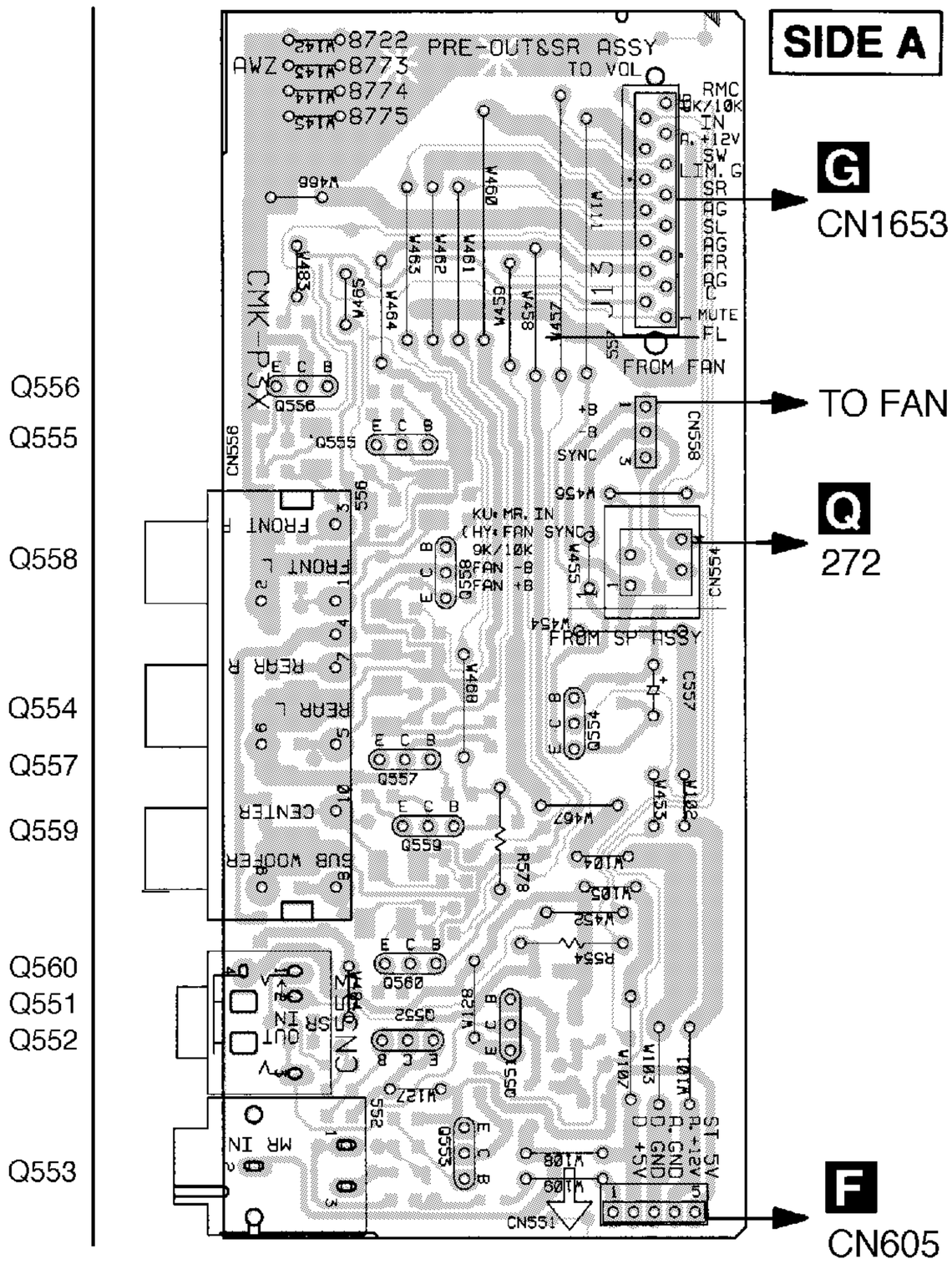
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respecitve destinations, be sure to check with the schematic diagram.
4. Viewpoint of PCB diagrams

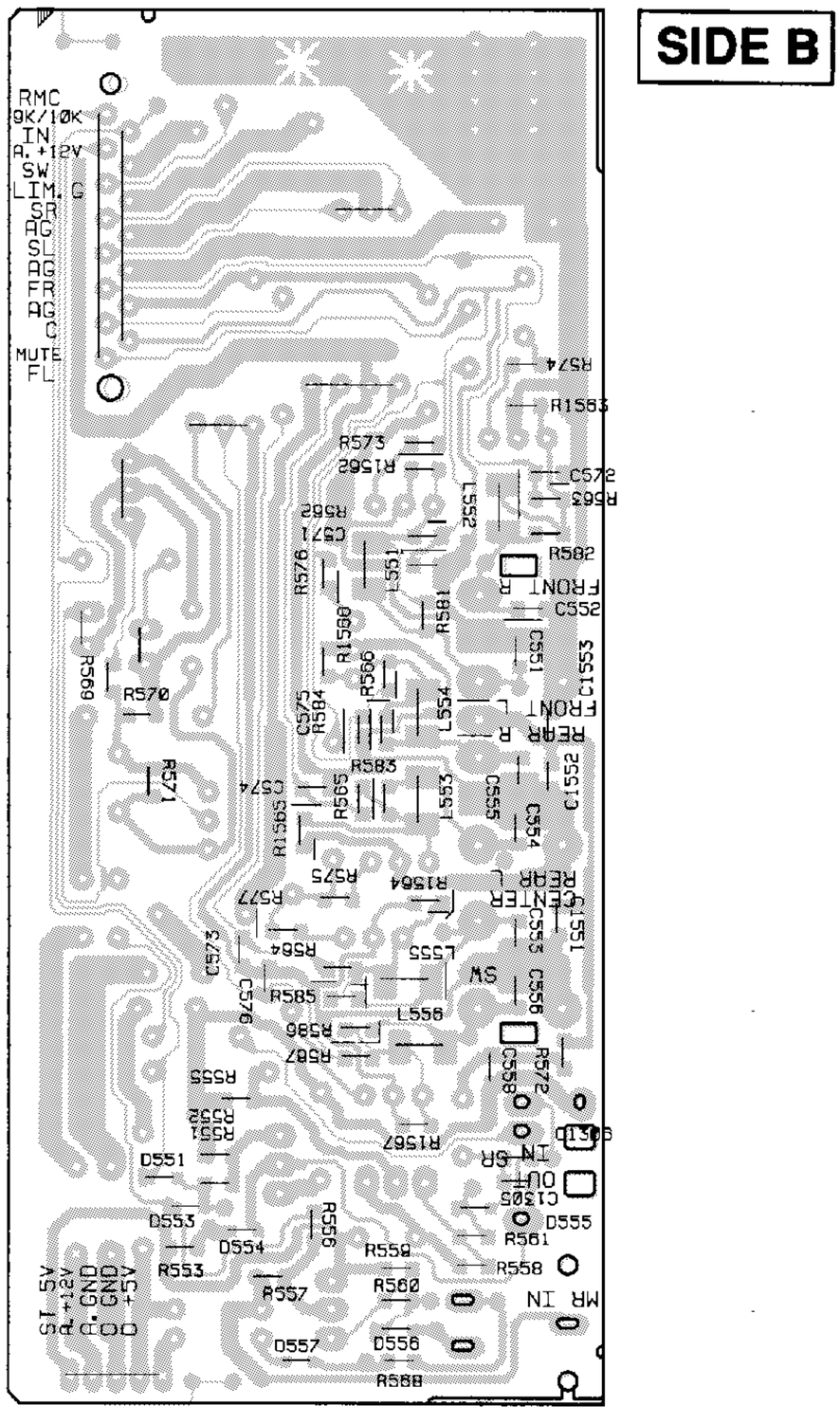


4.1 PRE-OUT & SR ASSY

C PRE-OUT & SR ASSY

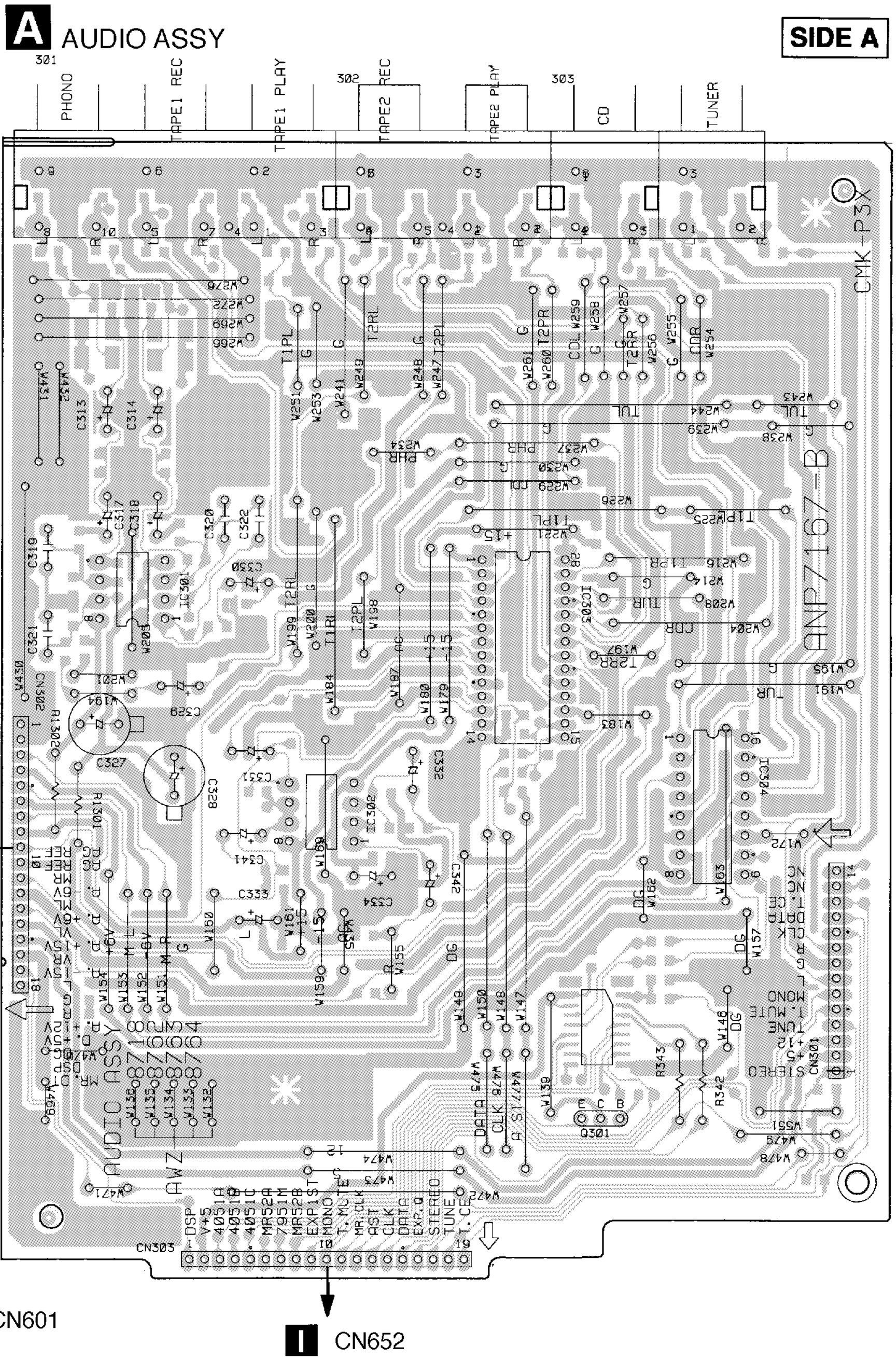


C PRE-OUT & SR ASSY



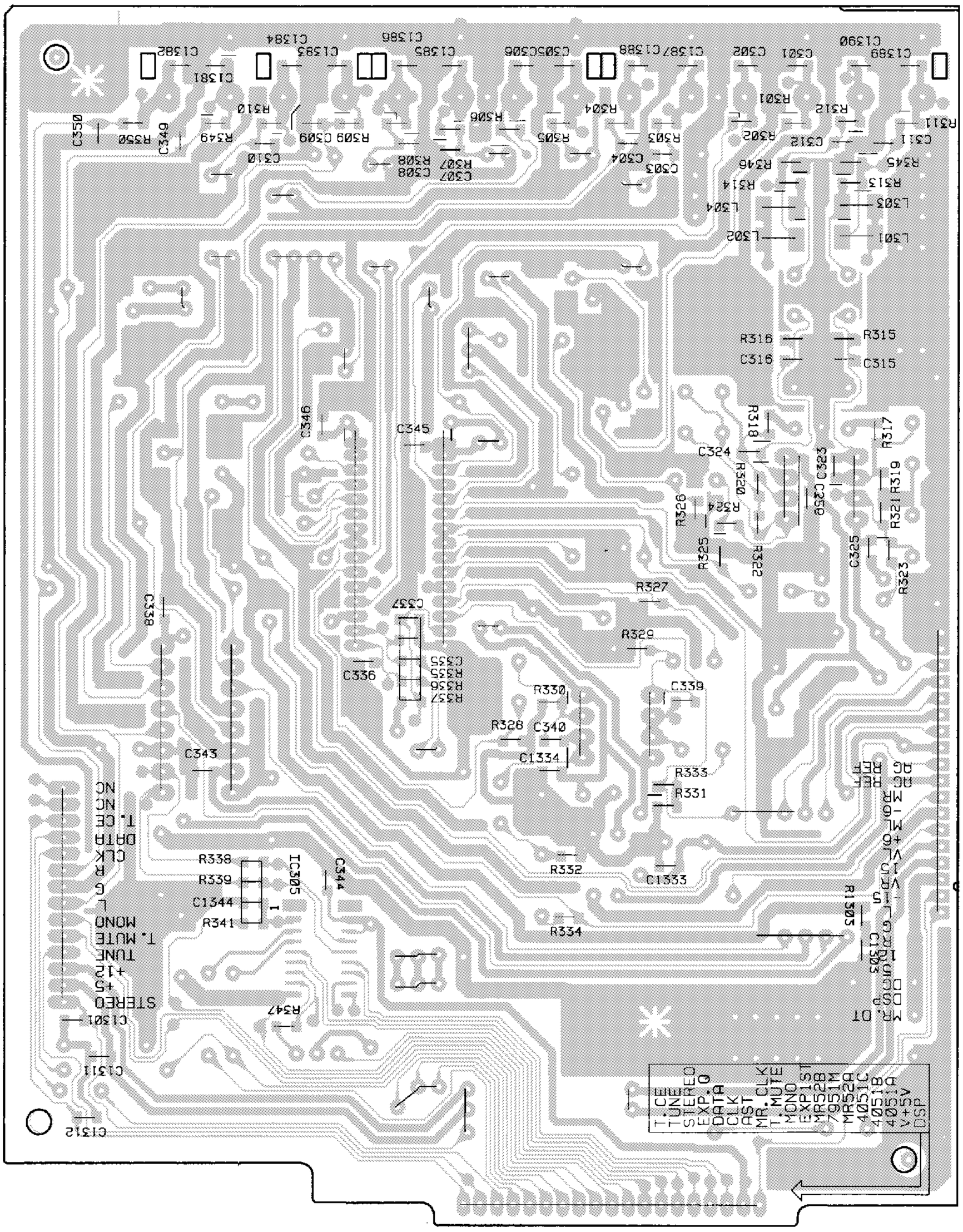
ANP7167-B

4.2 AUDIO ASSY



A AUDIO ASSY

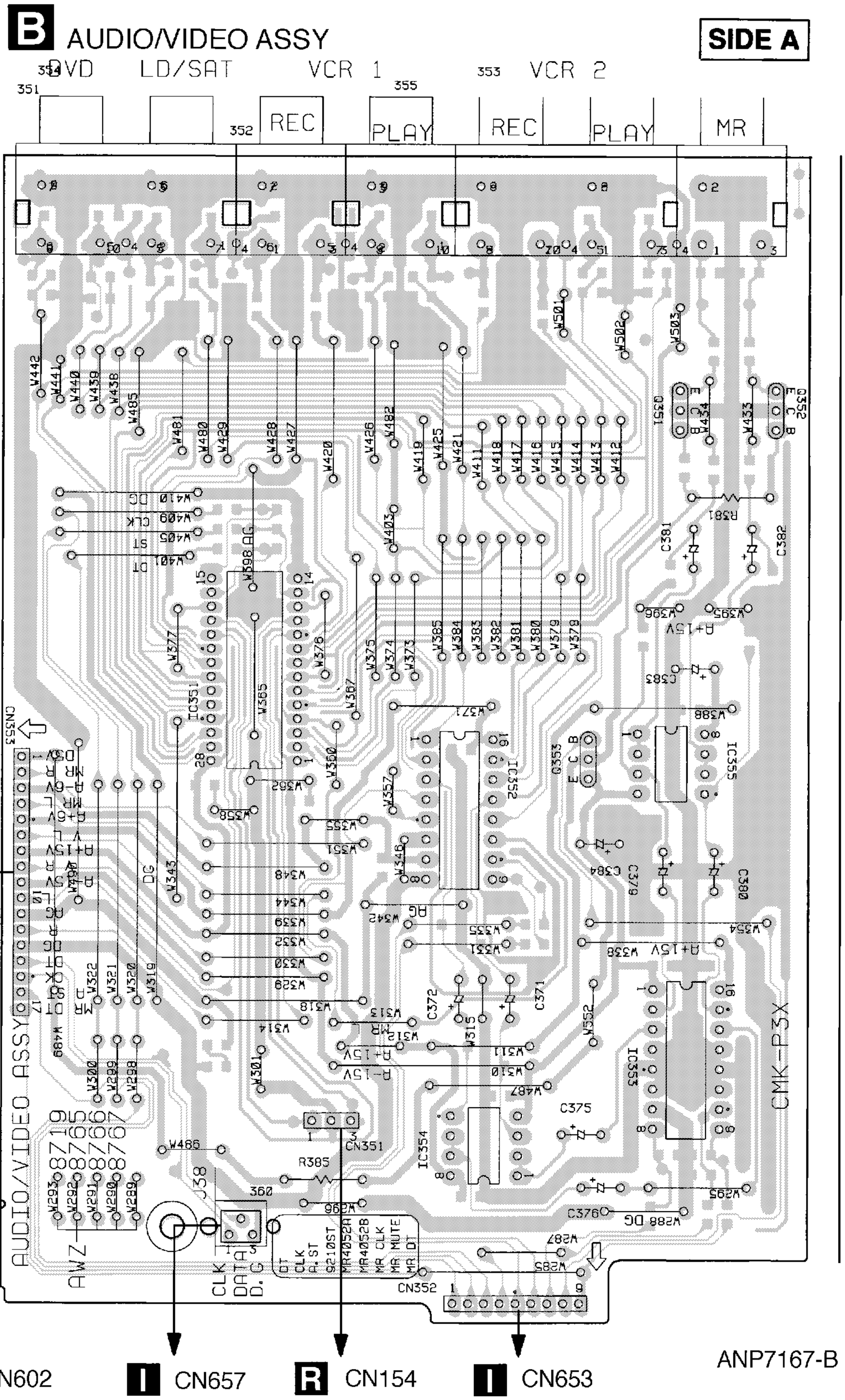
SIDE B



IC305

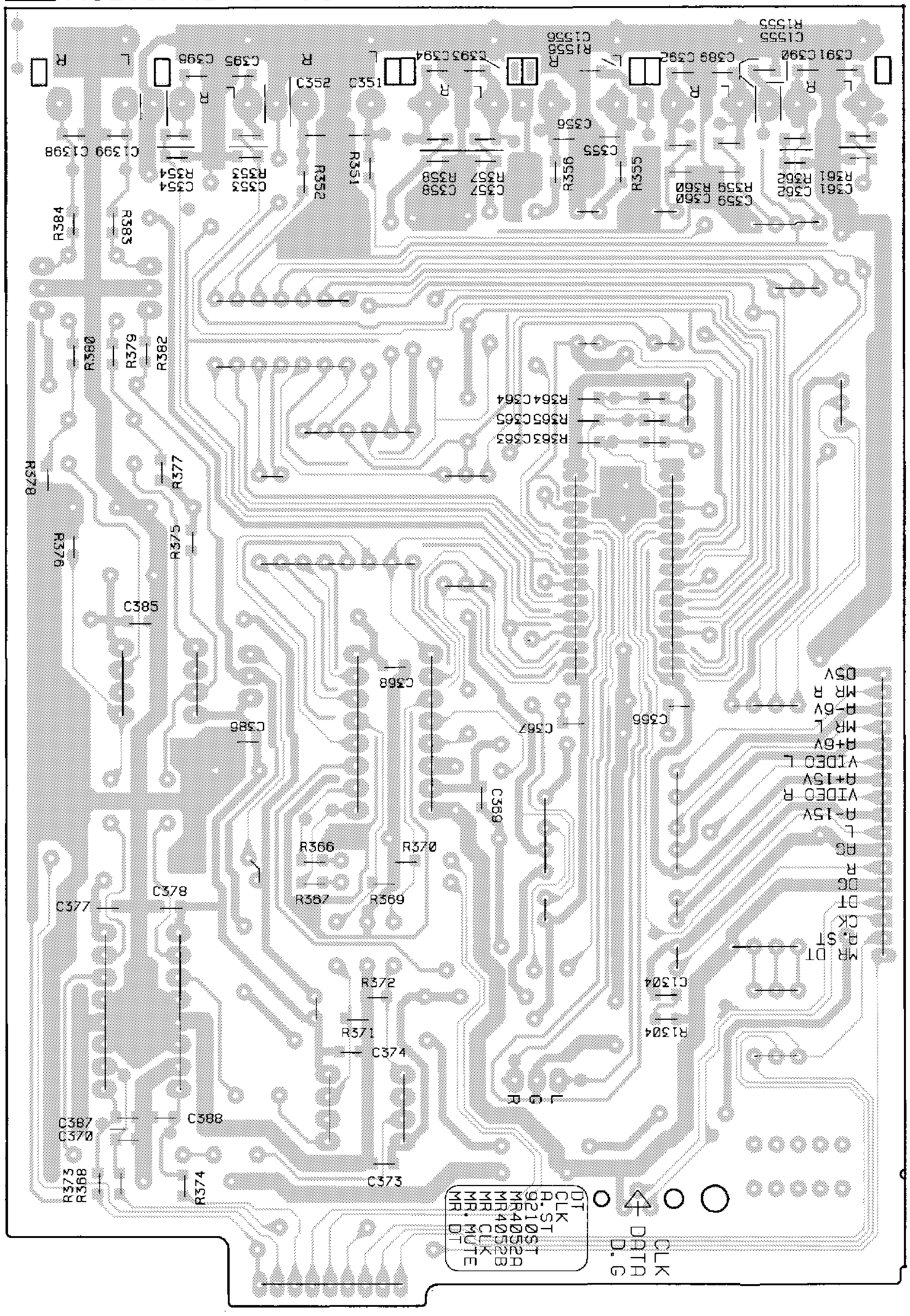
ANP7167-B

4.3 AUDIO/VIDEO ASSY



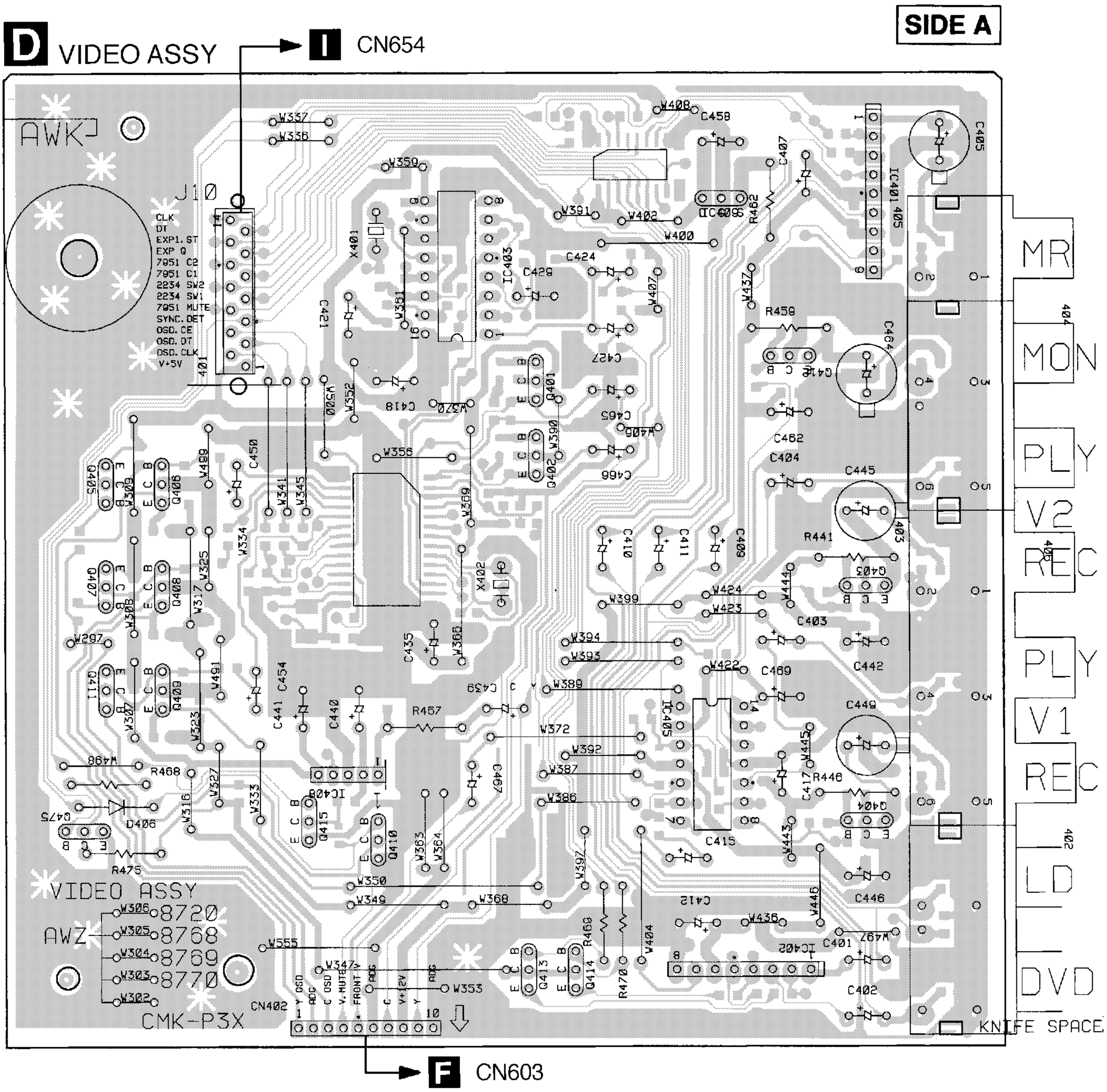
B AUDIO/VIDEO ASSY

SIDE B



ANP7167-B

4.4 VIDEO ASSY

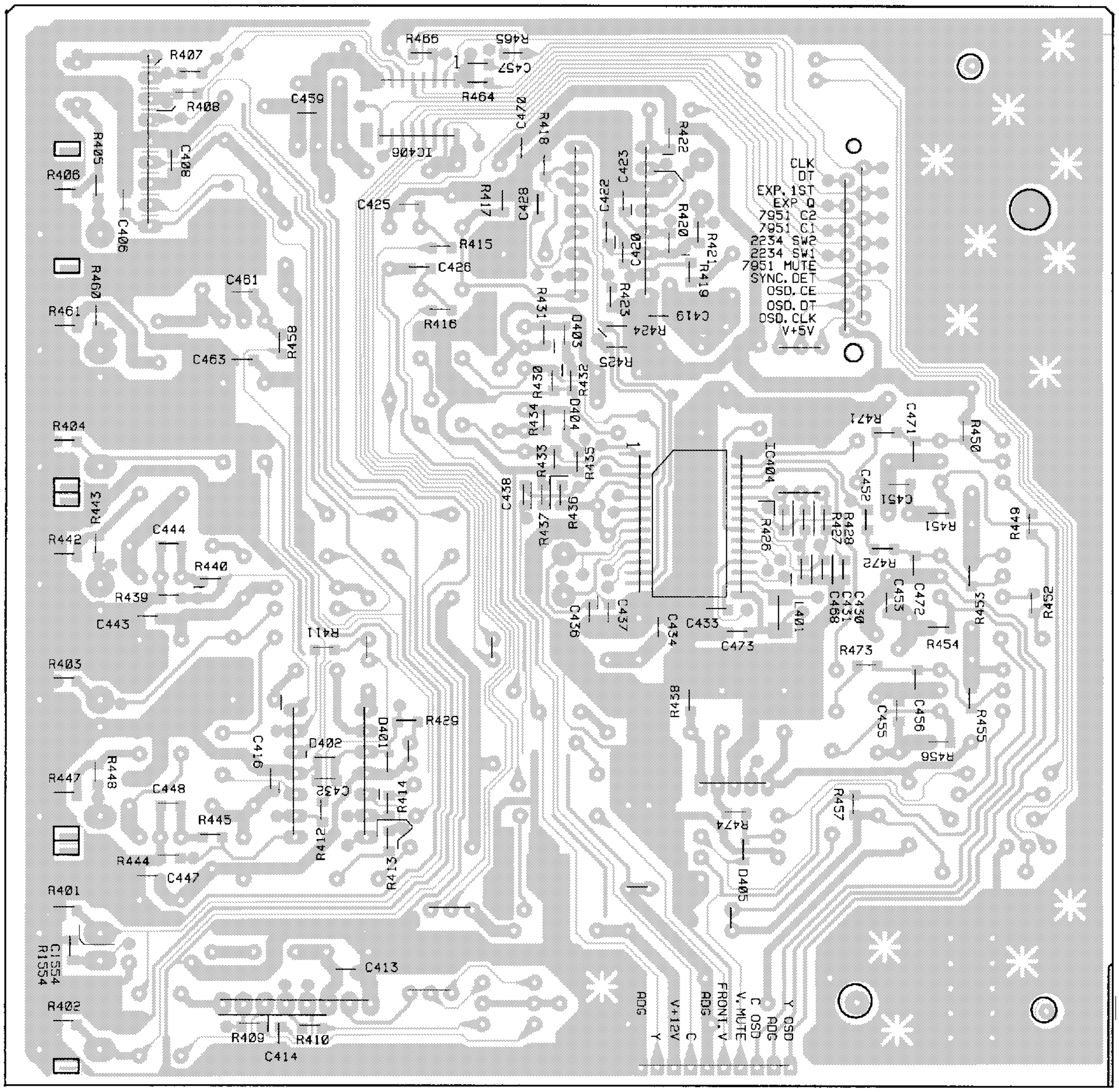


Q405 Q406 Q407 Q408 Q411 Q409 Q475 | Q415 IC408 Q410 | IC403 | Q401 Q402 Q413 Q414 | IC409 IC405 IC402 | Q412 IC401 Q403 Q404

ANP7167-B

SIDE B

D VIDEO ASSY

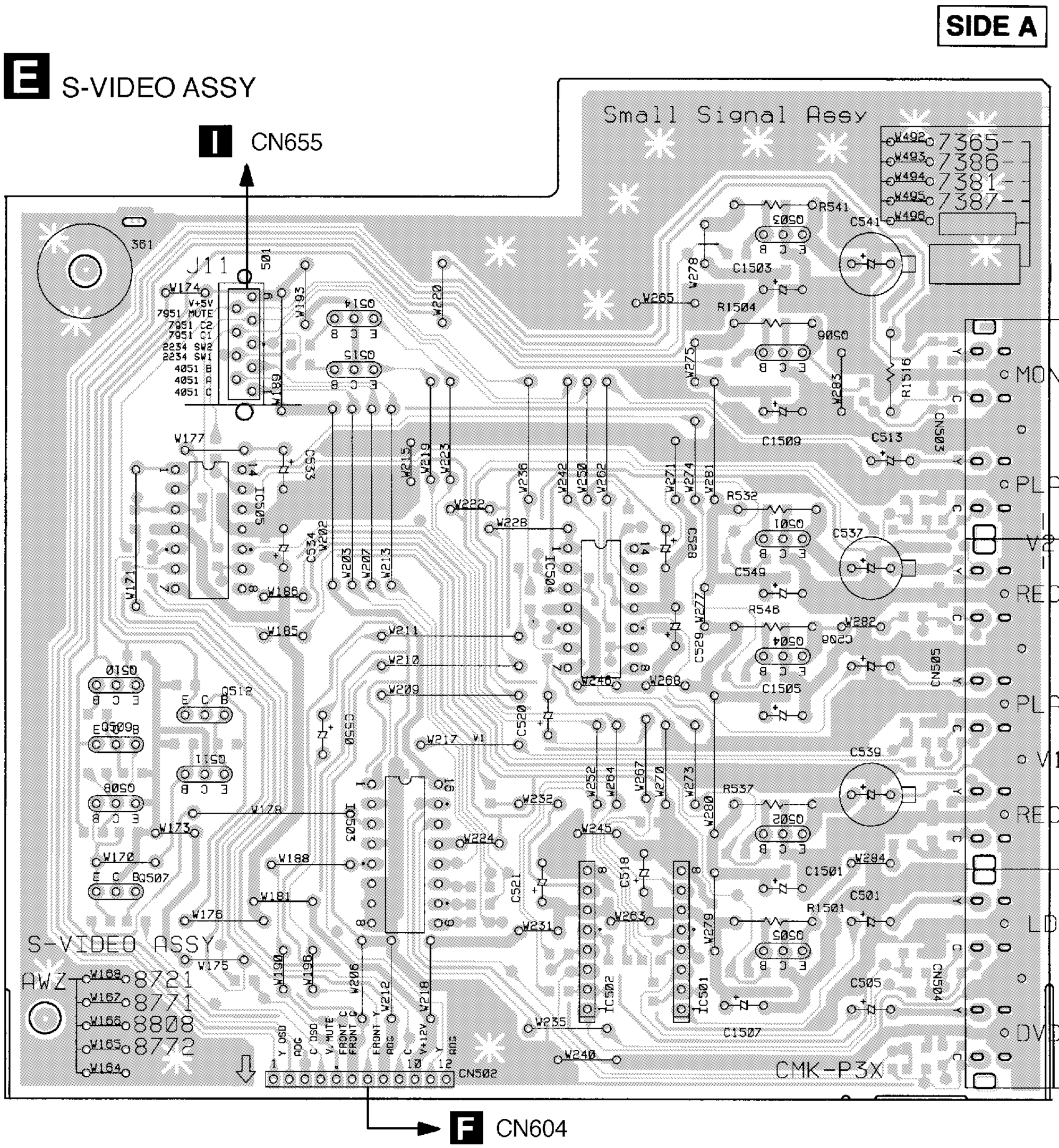


IC406 IC404

ANP7167-B

4.5 S-VIDEO ASSY

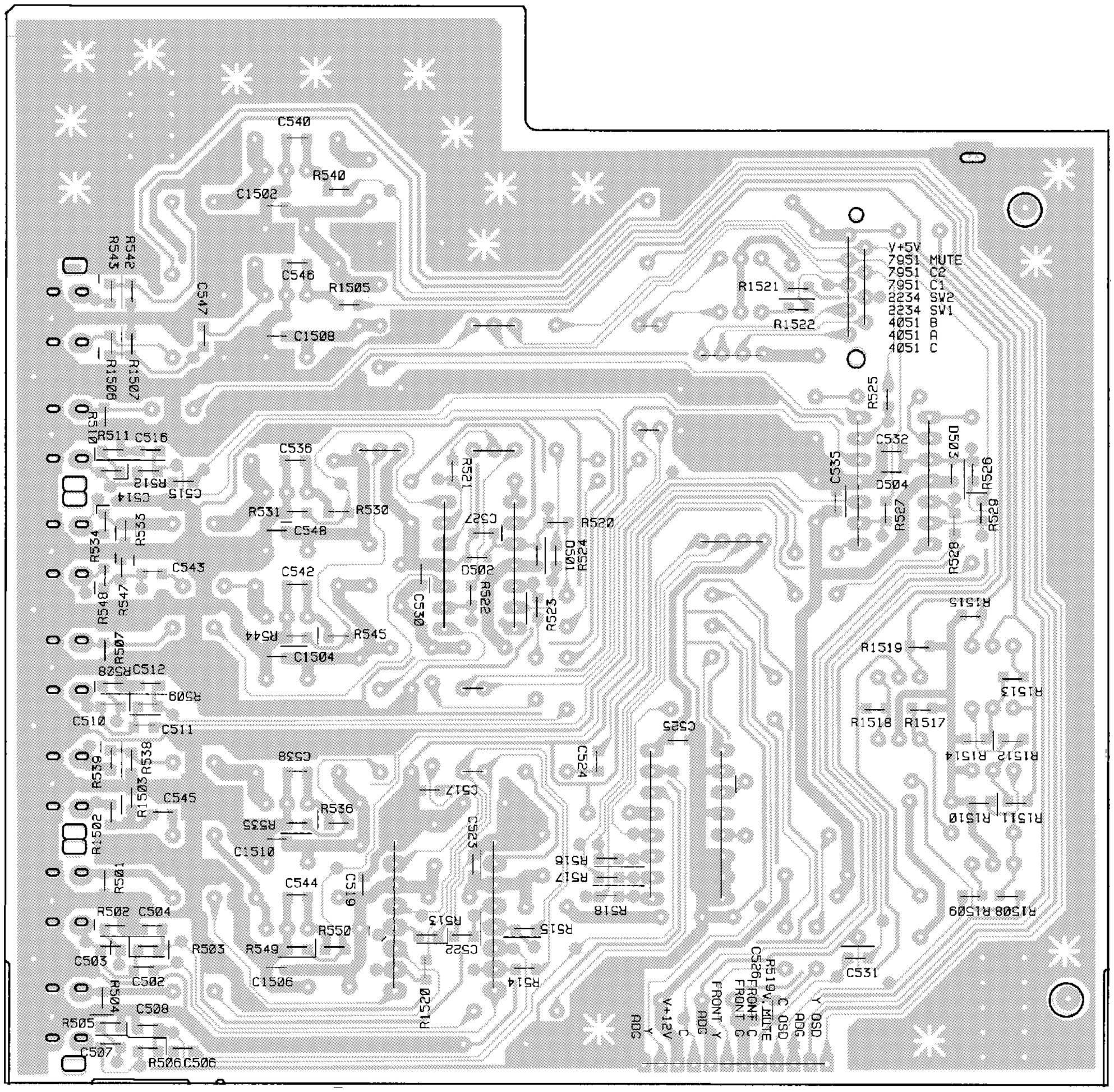
SIDE A



ANP7167-B

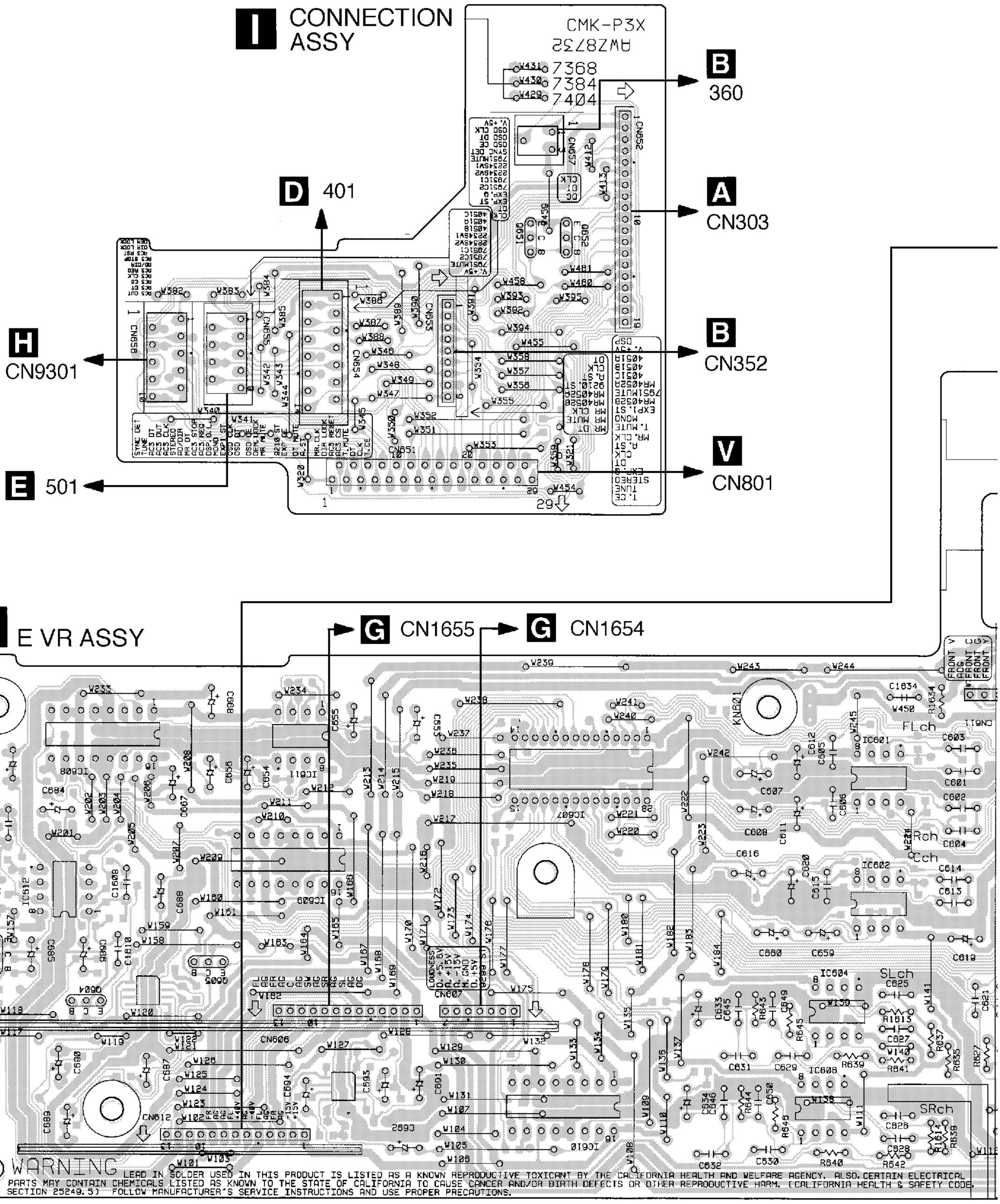
SIDE B

E S-VIDEO ASSY



ANP7167-B

4.6 E VR ASSY, CONNECTION ASSY, REGULATOR(3) ASSY AND V-AMP ASSY


I CONNECTION ASSY
CMK-P3X
AWZ8732
W431 7368
W430 7384
W429 7404
B 360
D 401
A CN303
H CN9301
B CN352
E 501
V CN801
F E VR ASSY
G CN1655
G CN1654
FLch
Rch
Cch
SLch
SRch
WARNING
LEAD IN SOLDER USED IN THIS PRODUCT IS LISTED AS A KNOWN REPRODUCTIVE TOXICANT BY THE CALIFORNIA HEALTH AND WELFARE AGENCY. ALSO, CERTAIN ELECTRICAL PARTS MAY CONTAIN CHEMICALS LISTED AS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. (CALIFORNIA HEALTH & SAFETY CODE, SECTION 25249.5) FOLLOW MANUFACTURER'S SERVICE INSTRUCTIONS AND USE PROPER PRECAUTIONS.

Q603 IC612 IC608 Q604 Q605 IC611 IC609 IC607 IC610 IC604 IC601 IC606 IC602

F I

SIDE A

L REGULATOR(3) ASSY

M V-AMP ASSY

Q
CN275

Q706
Q708
Q704
Q702
Q705
Q707
Q703
Q701

T
103

R
CN154

E
CN502

Q
CN277

D
CN402

C
CN551

H
CN9661

H
CN9801

B
CN353

A
CN302

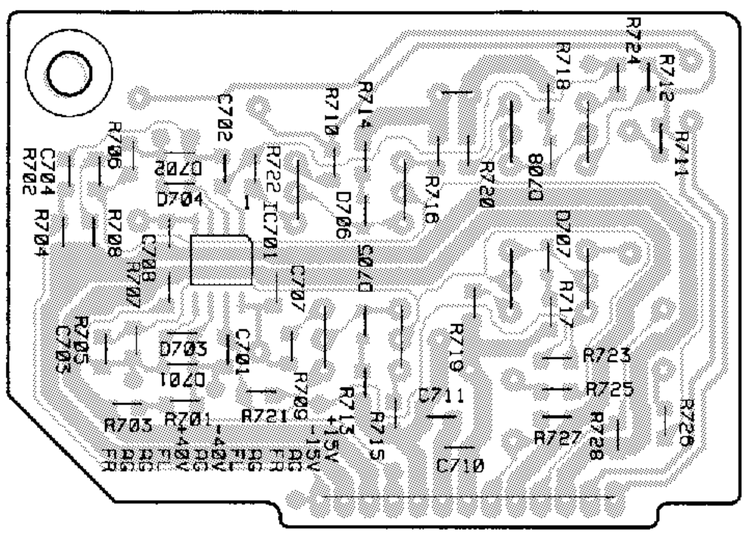
IC603 IC605

IC615 IC616
Q602 Q601

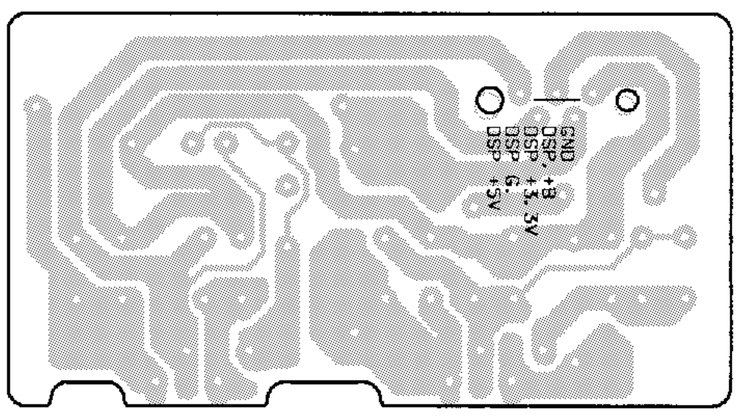
ANP7168-B

VSA-E06

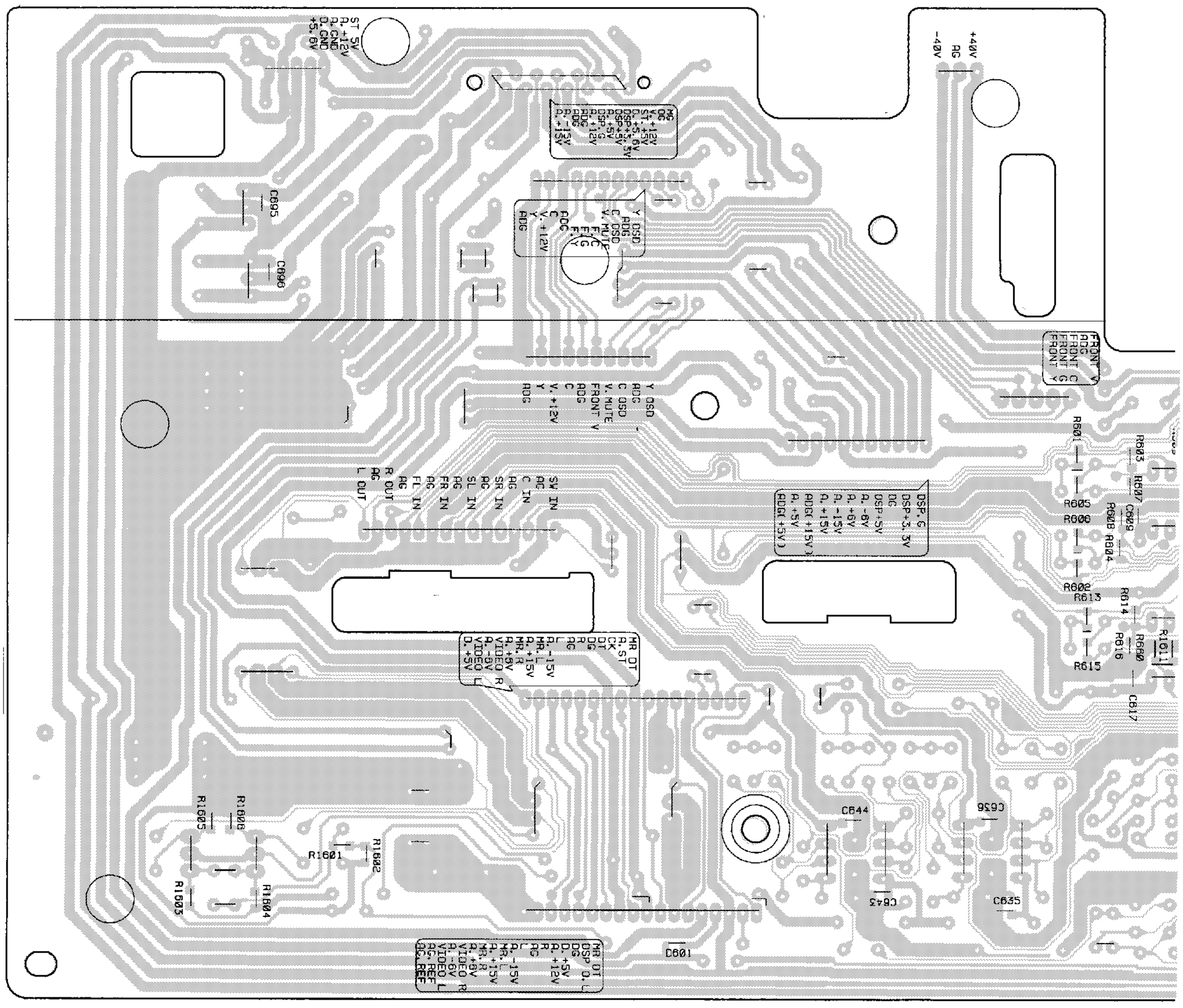
M V-AMP ASSY



L REGULATOR(3) ASSY

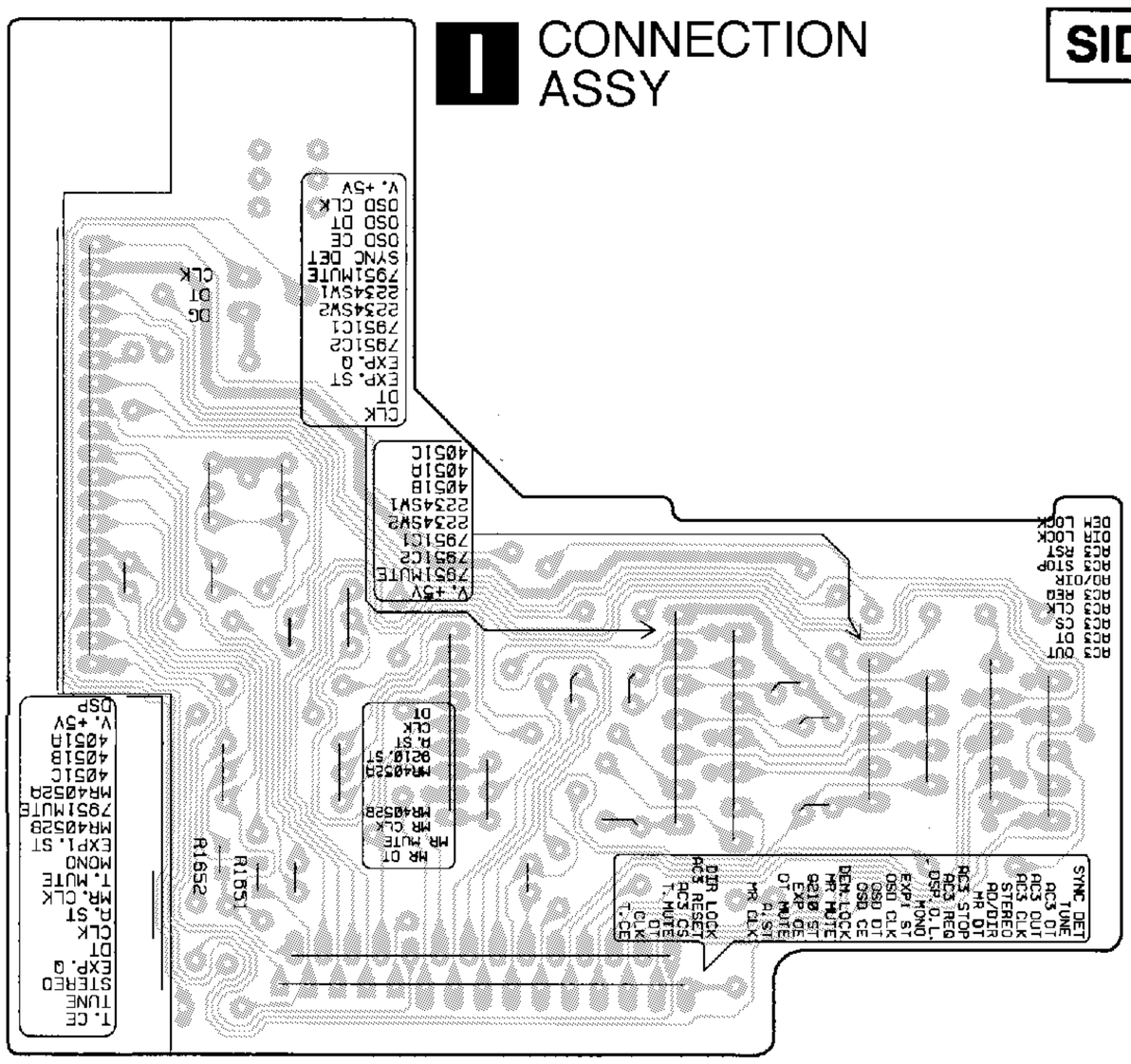


F E VR ASSY



I CONNECTION ASSY

SIDE B



IC614 IC613

ANP7168-B

4.7 MASTER VR ASSY, REGULATOR(1) ASSY AND REGULATOR(2) ASSY

SIDE A

G MASTER VR ASSY

V 806 **V** 801 **N** 902

J REGULATOR(1) ASSY

Q CN276

K REGULATOR(2) ASSY

P 1202 **C** 557 **P** 1201 **F** CN606 **F** CN607

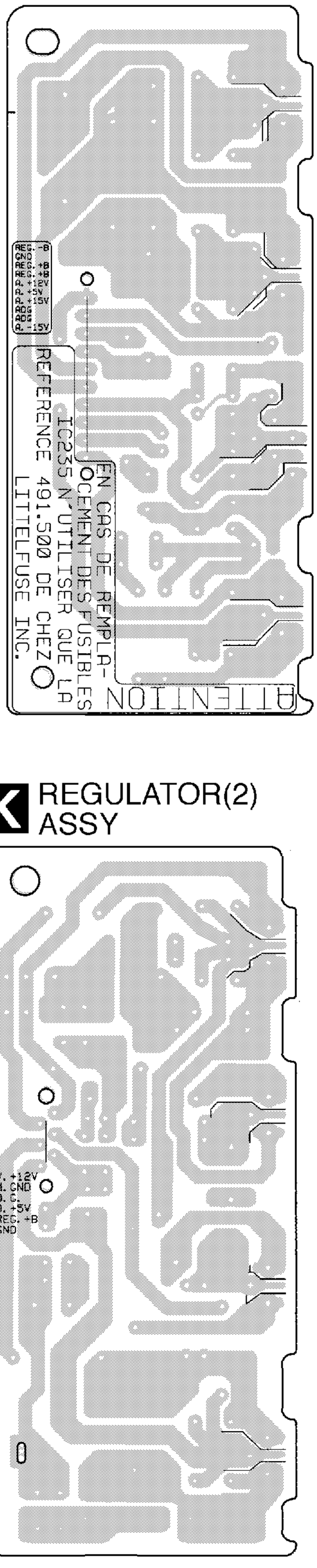
Q CN274

VR1654 VR1653 VR1652
VR1658 VR1657
VR1656 VR1655

Q1661 IC1656 Q1662 IC1652 Q1664 IC1653 Q1654 Q1663 Q1657
Q1665 Q1656 Q1651 Q1652 Q1655 IC1654 Q1658
Q1653 Q1660
Q1659

ANP7168-B

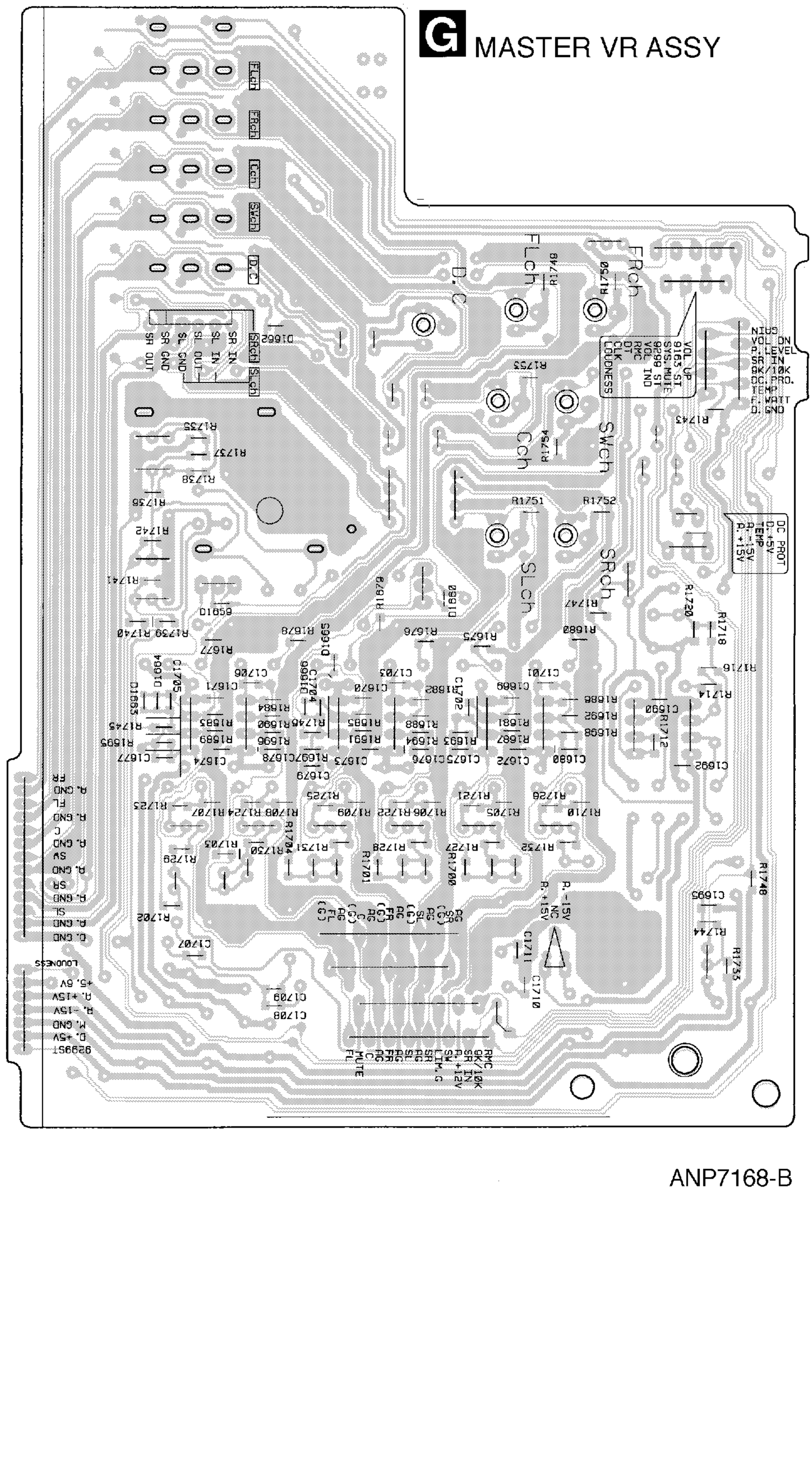
J REGULATOR(1) ASSY



K REGULATOR(2) ASSY

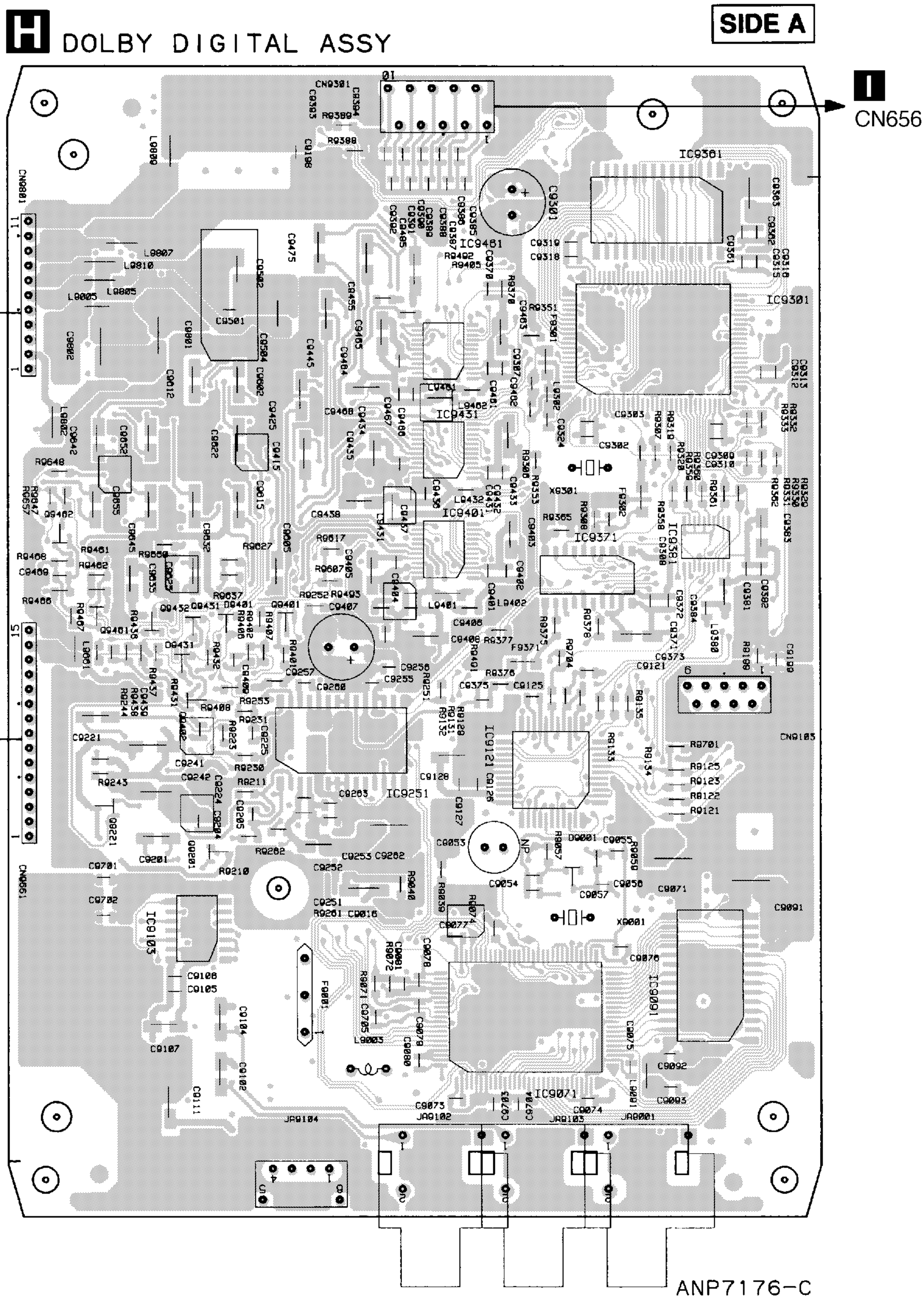
SIDE B

G MASTER VR ASSY



ANP7168-B

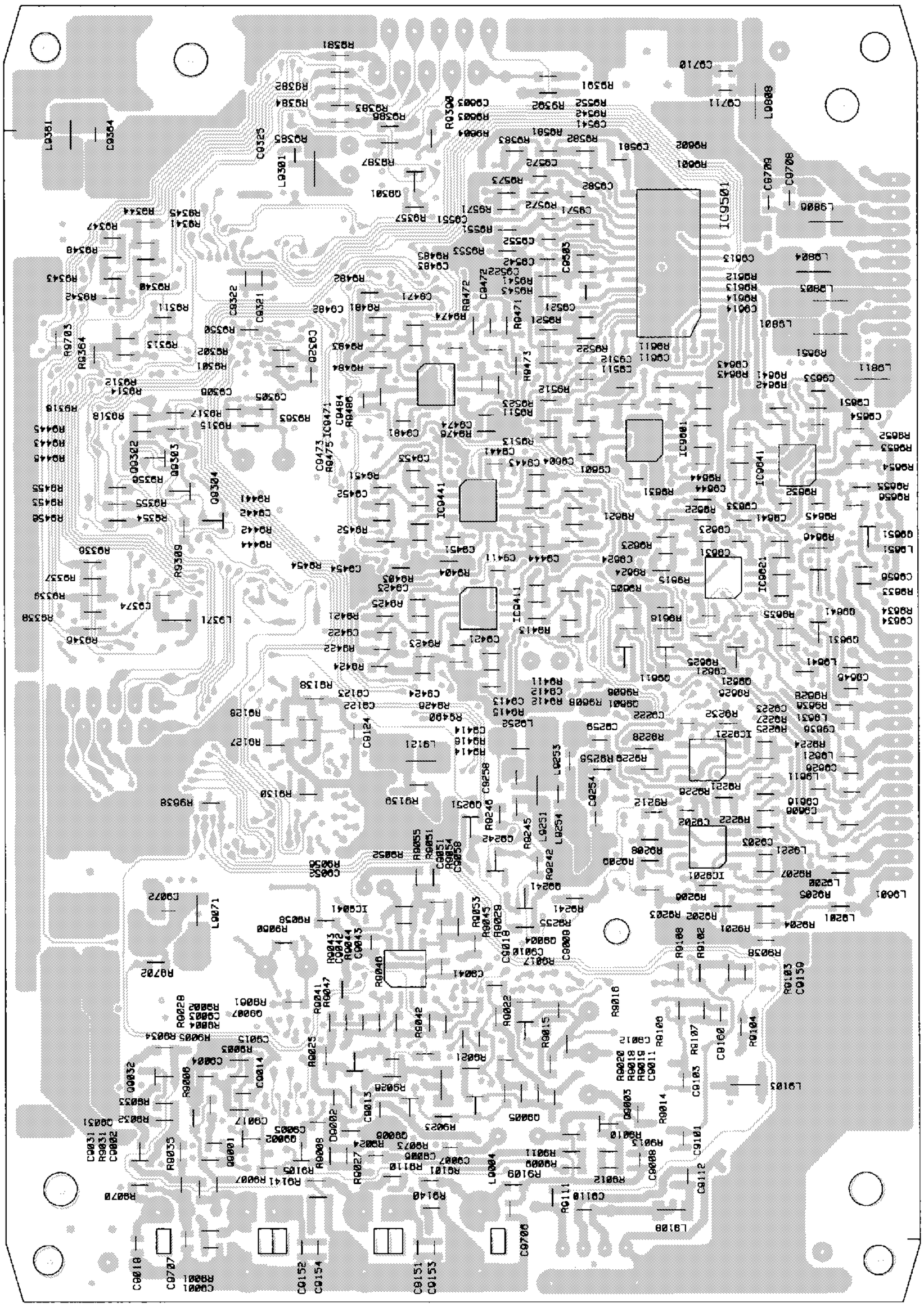
4.8 DOLBY DIGITAL ASSY



Q9462	Q9431	Q9401	IC9461	IC9371	IC9361
Q9461	Q9402	IC9251	IC9431	IC9121	IC9301
Q9221	Q9201		IC9401	IC9071	IC9381
Q9432	IC9103				IC9091

DOLBY DIGITAL ASSY

SIDE B



ANP7176-C

Q9302	Q9304	IC9471	IC9441	IC9501	IC9621	IC9641
Q9303	Q9002	IC9041	IC9411	IC9601	Q9621	Q9651
Q9032		Q9006	Q9251	Q9601	IC9221	Q9641
Q9031		Q9301	Q9242	Q9611	IC9201	Q9631
		Q9005	Q9241	Q9003		
			Q9004			

4.9 VOLTAGE AMP ASSY

N VOLTAGE AMP ASSY

SIDE A

P
CN1201

G
CN1651

O
CN1051

TO
THERMISTOR
TH901

O
1051

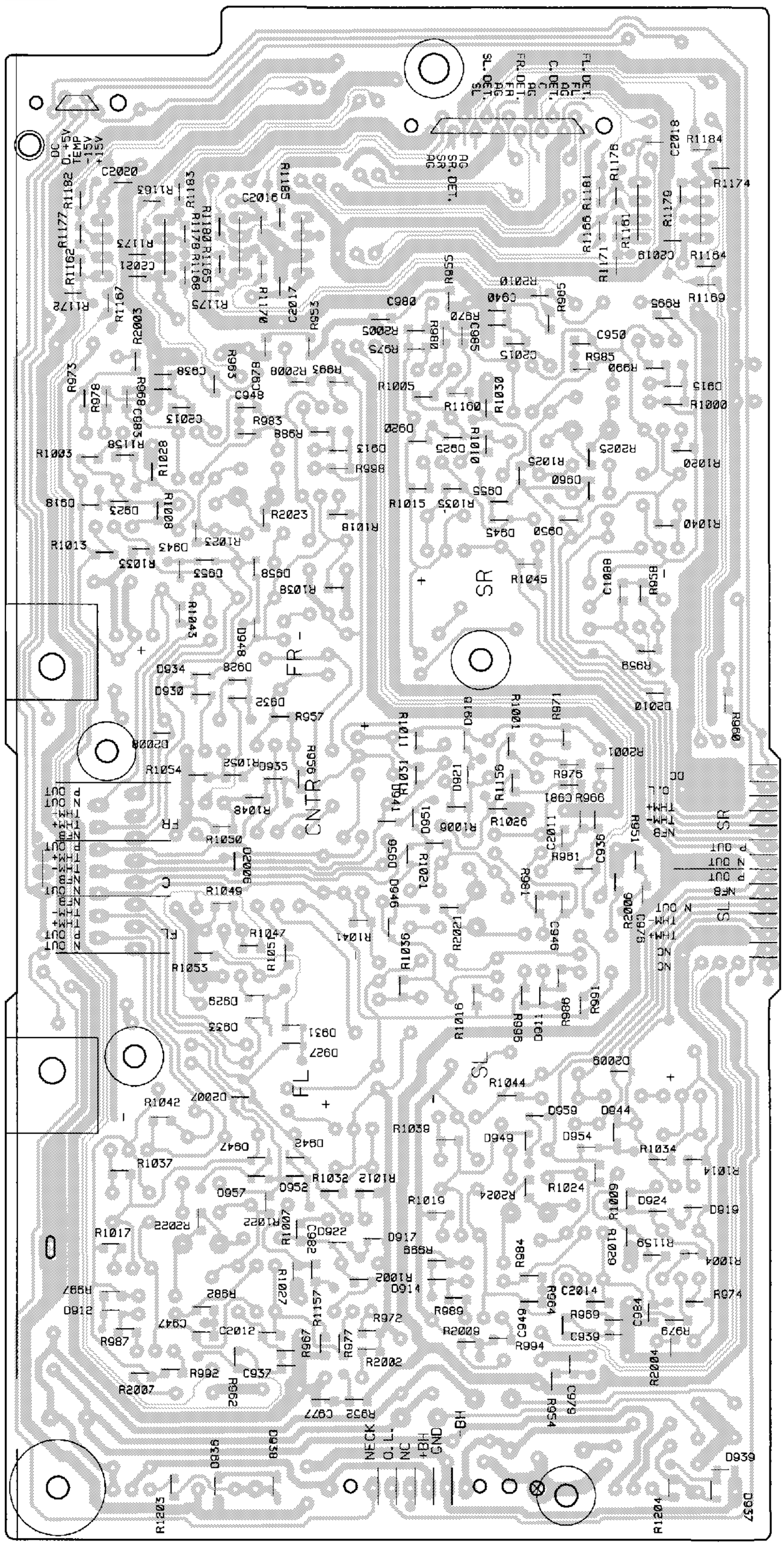
R
CN155

IC902	Q915	Q911	Q905	Q920	Q931	Q913	IC901	Q903	IC903	Q946
Q934	Q930	Q909	Q910	Q925	Q936	Q928	Q945	Q908	Q918	
Q924	Q940	Q904	Q916	Q935	Q932	Q938	Q907	Q944	Q923	
Q919	Q947		Q901	Q921	Q922		Q902	Q942	Q933	
	Q1062		Q906	Q939	Q917			Q941	Q937	
			Q926	Q929				Q943	Q927	
			Q914					Q912	Q1061	

ANP7171-B

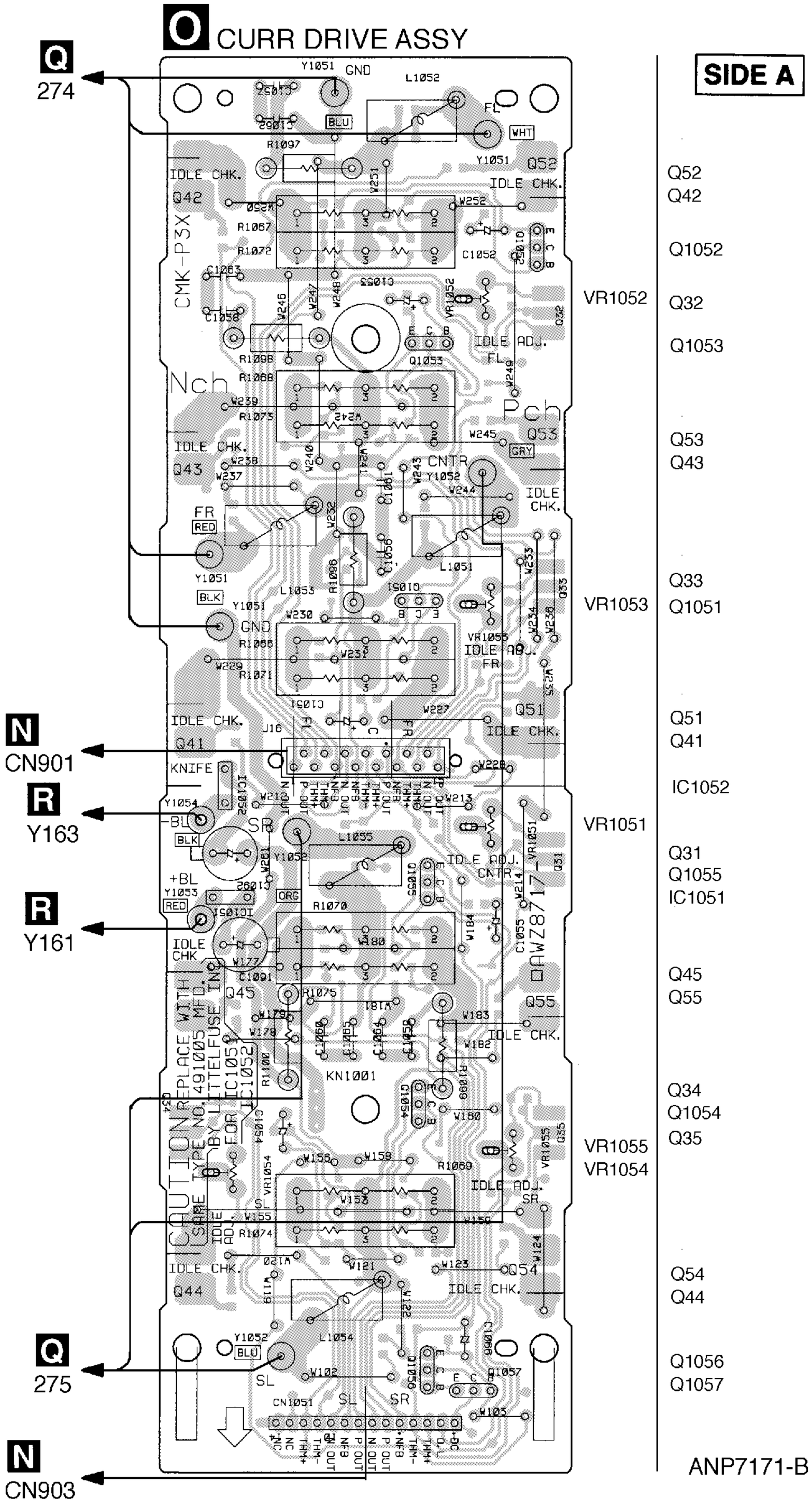
N VOLTAGE AMP ASSY

SIDE B



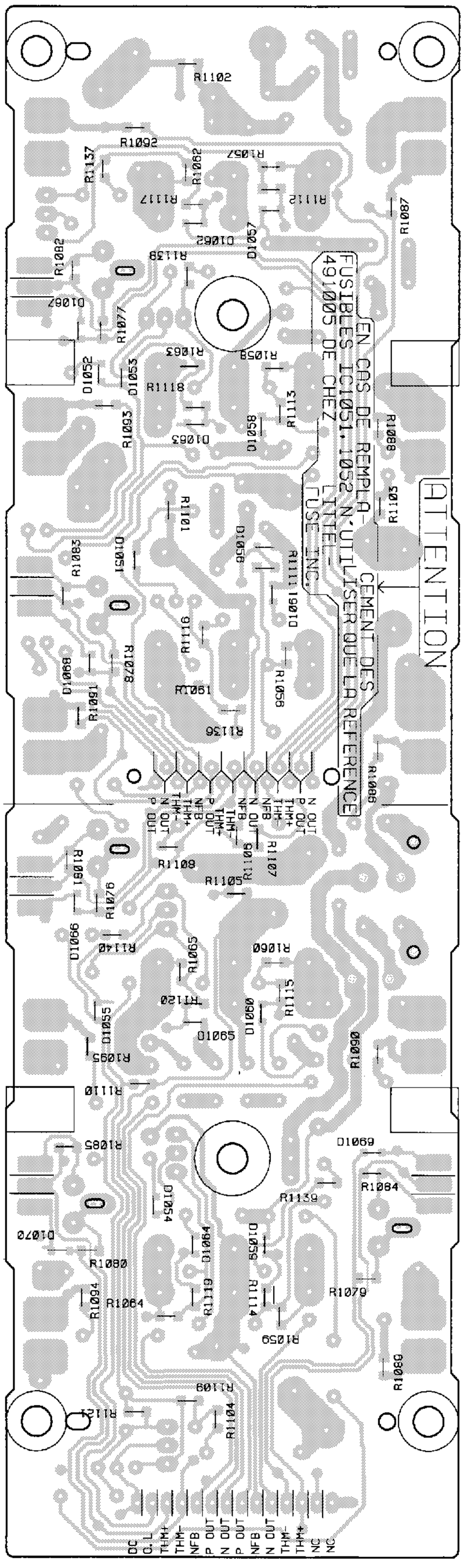
ANP7171-B

4.10 CURR DRIVE ASSY



CURR DRIVE ASSY

SIDE B

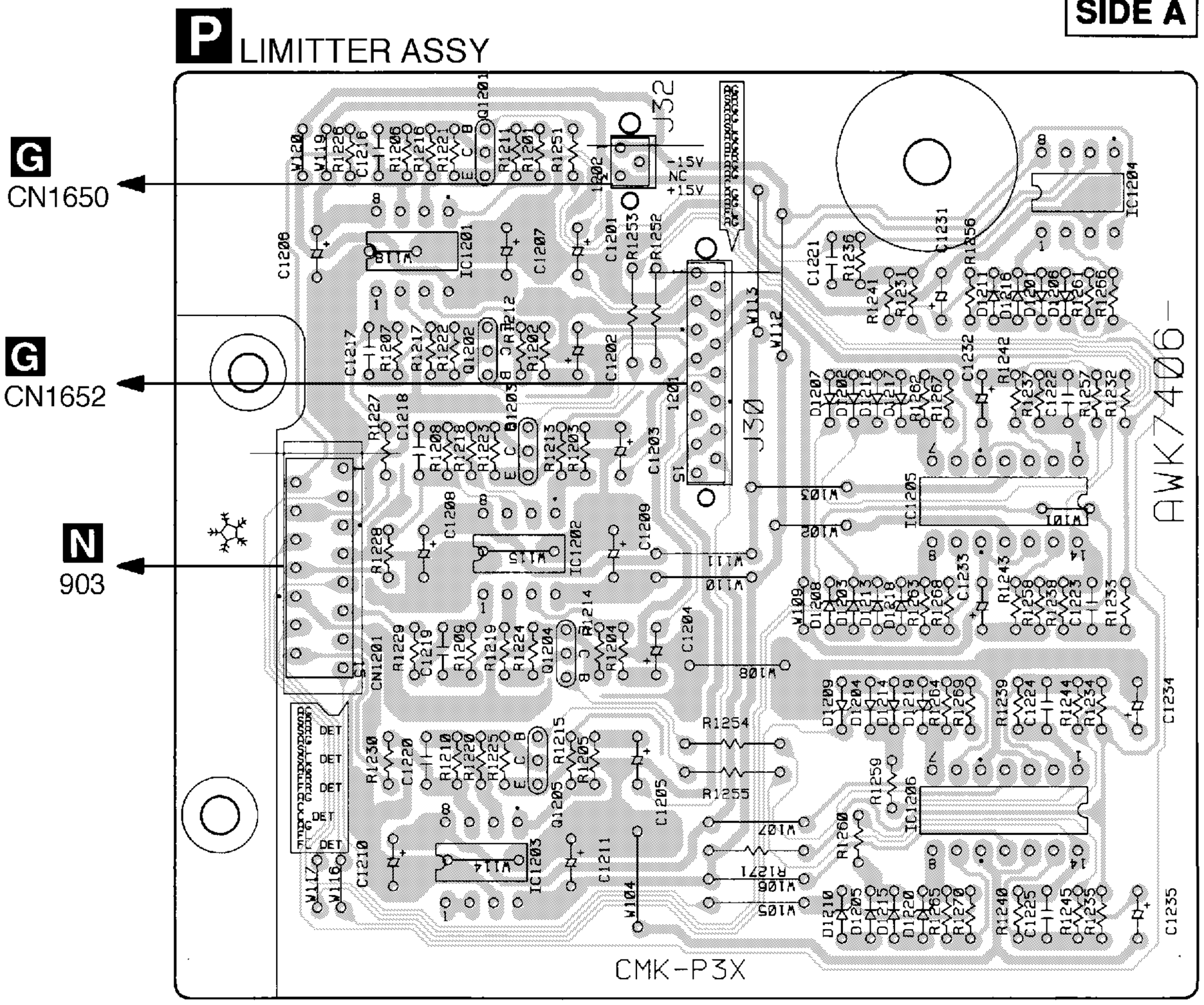


ANP7171-B

4.11 LIMITTER ASSY AND TRANS TERMINAL ASSY

SIDE A

P LIMITTER ASSY

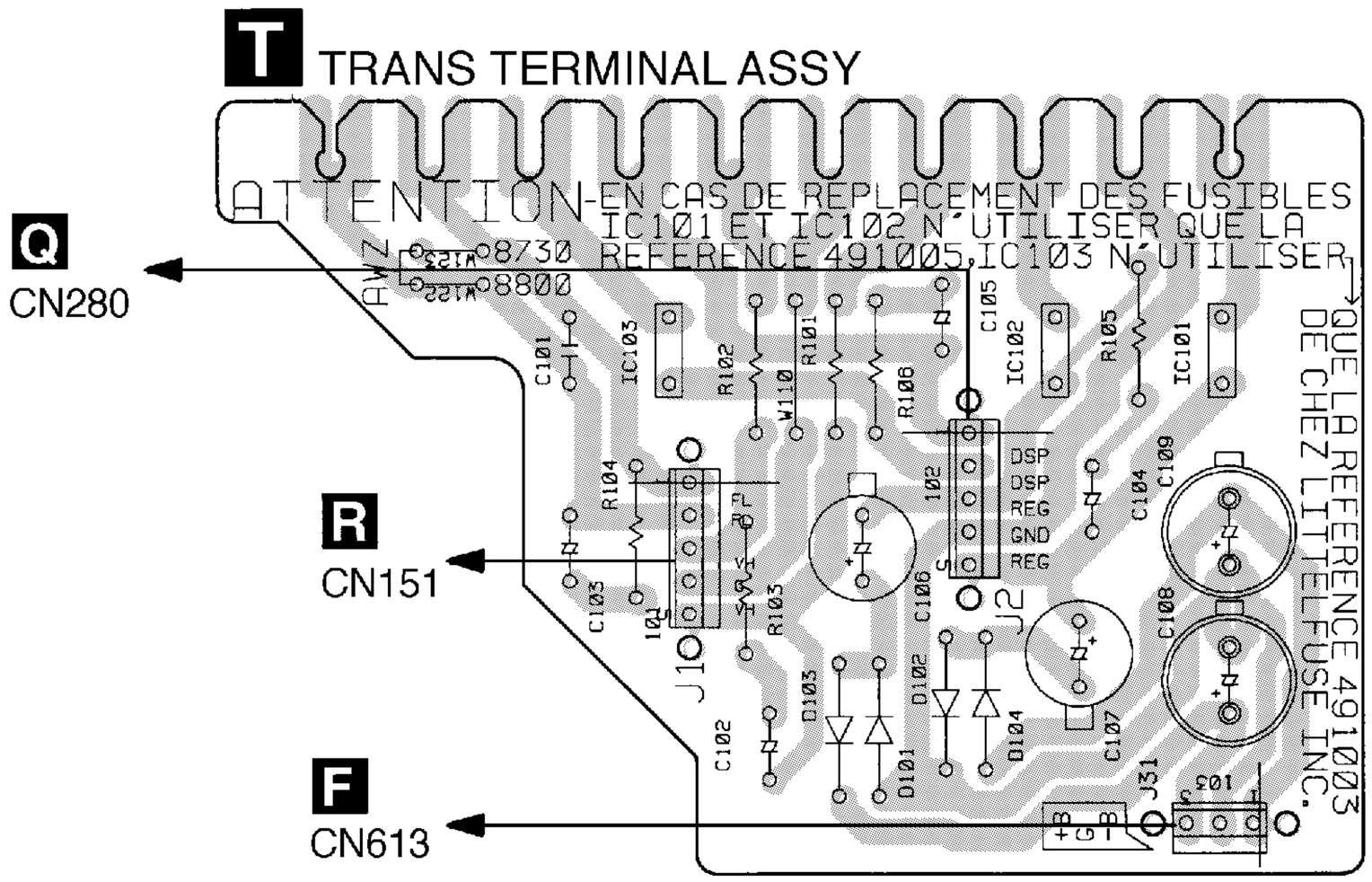


IC1201 Q1201 Q1203
Q1202 IC1202
IC1203 Q1204
Q1205

IC1205 IC1204
IC1206

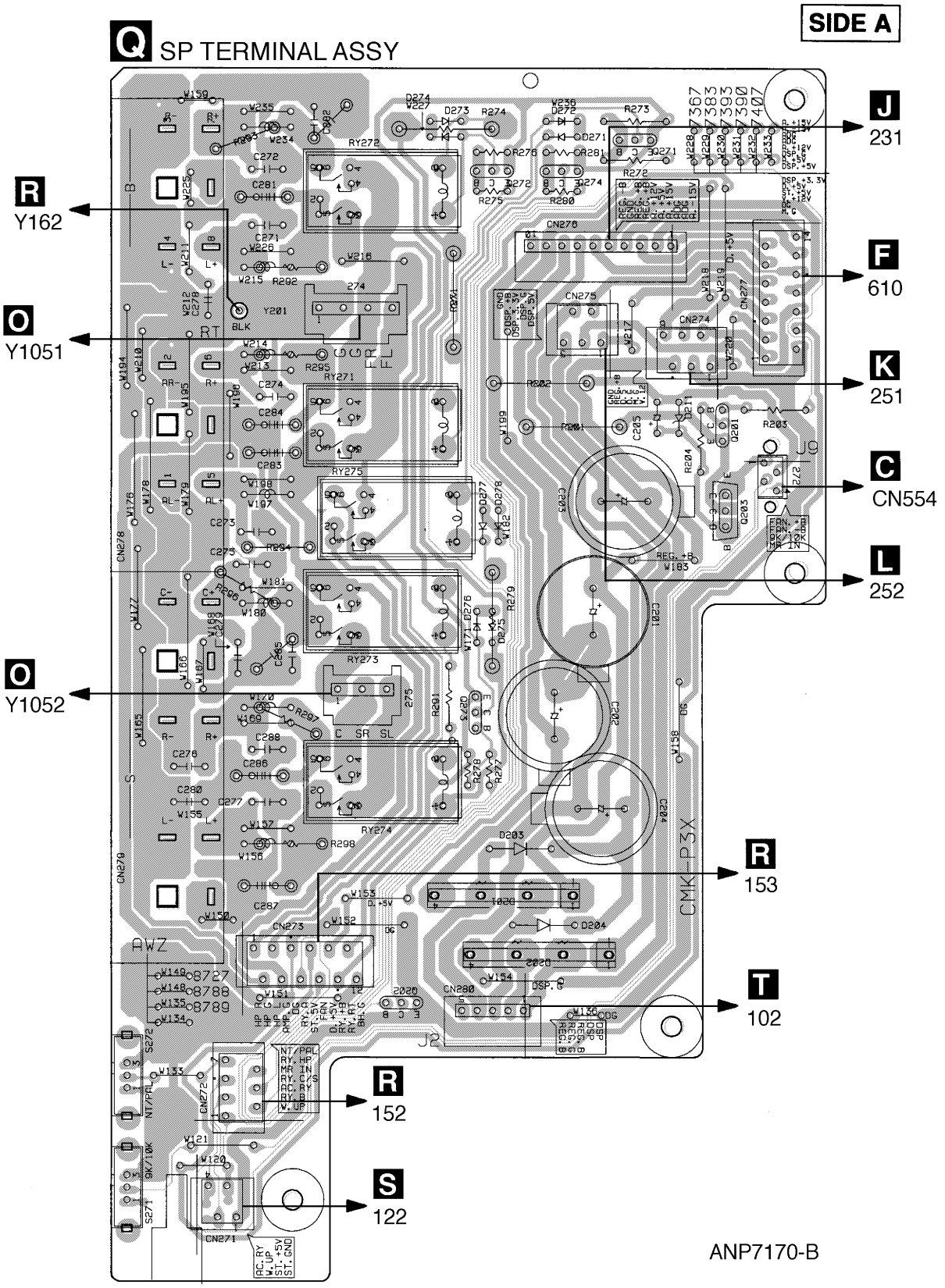
ANP7182-A

T TRANS TERMINAL ASSY

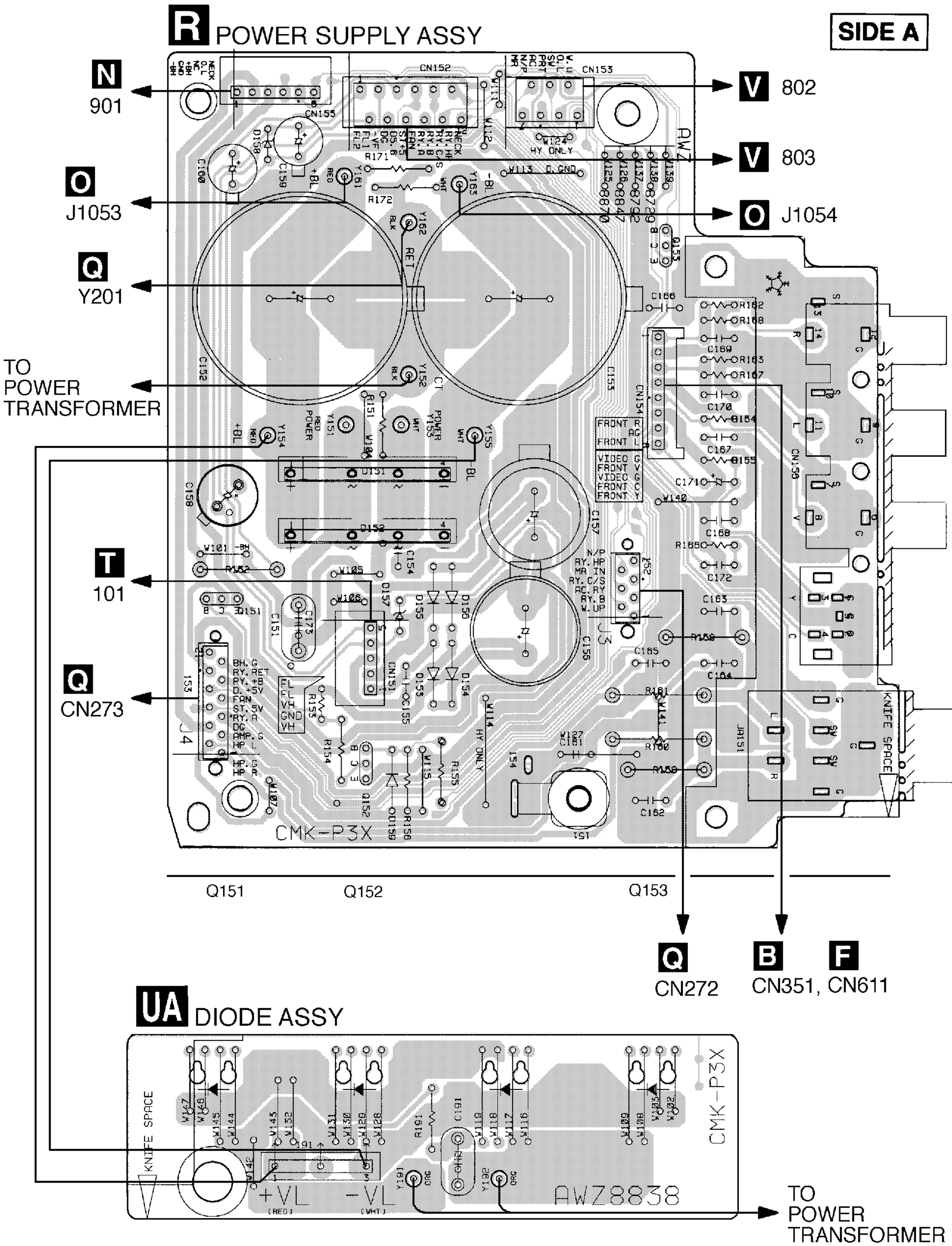


ANP7170-B

4.12 SP TERMINAL ASSY



4.13 POWER SUPPLY ASSY AND DIODE ASSY



ANP7170-B

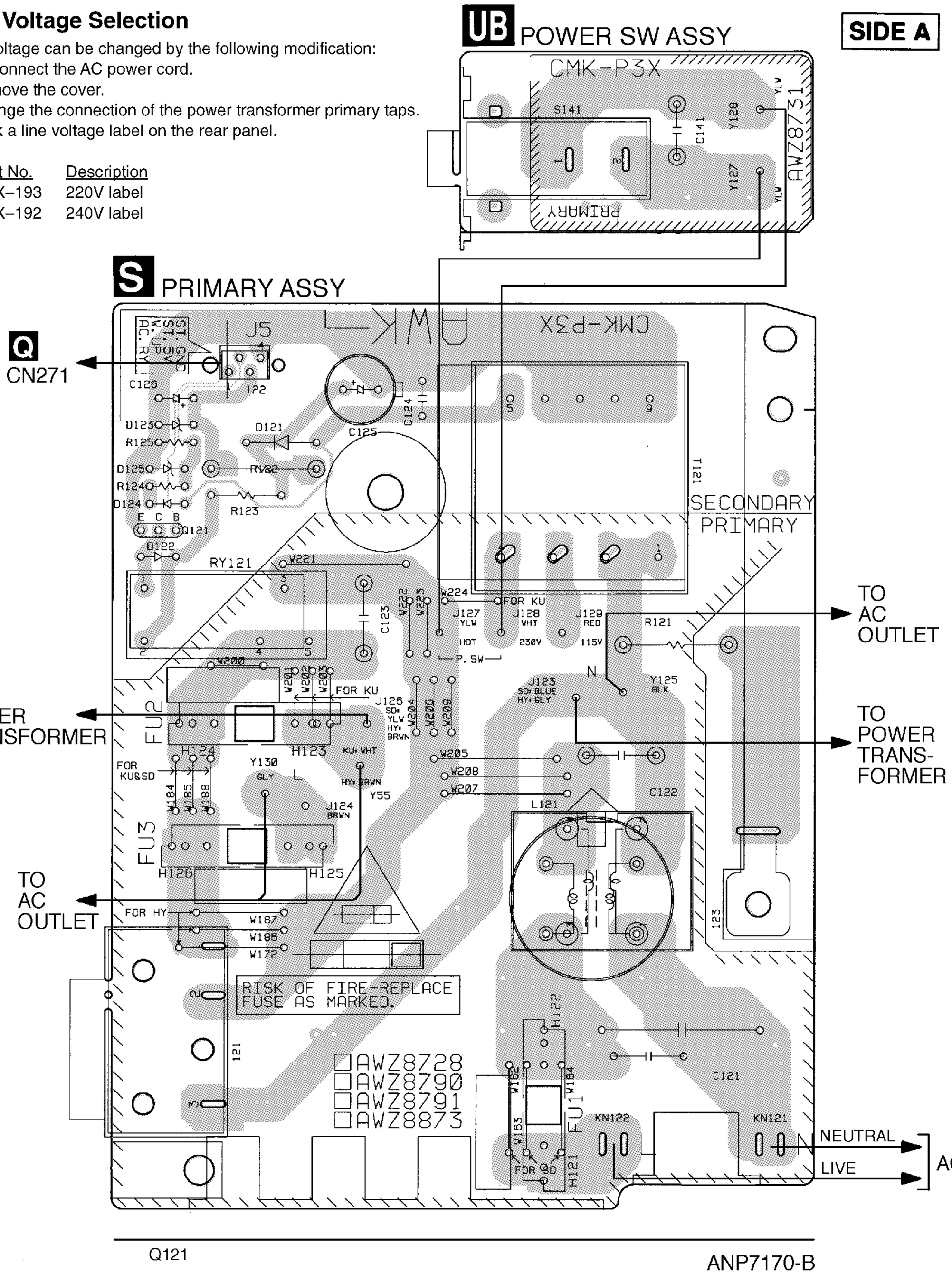
4.14 PRIMARY ASSY AND POWER SW ASSY

Line Voltage Selection

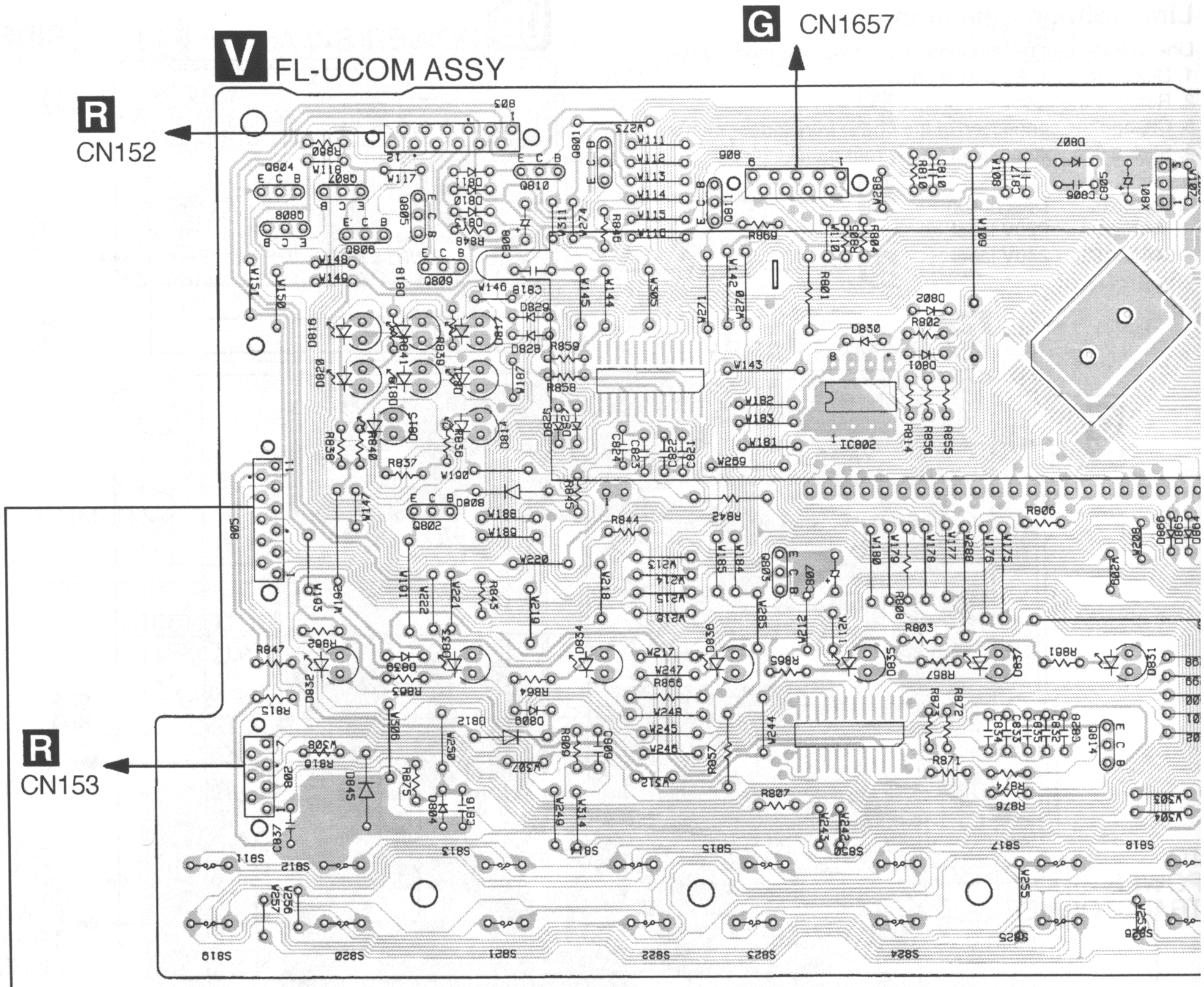
Line Voltage can be changed by the following modification:

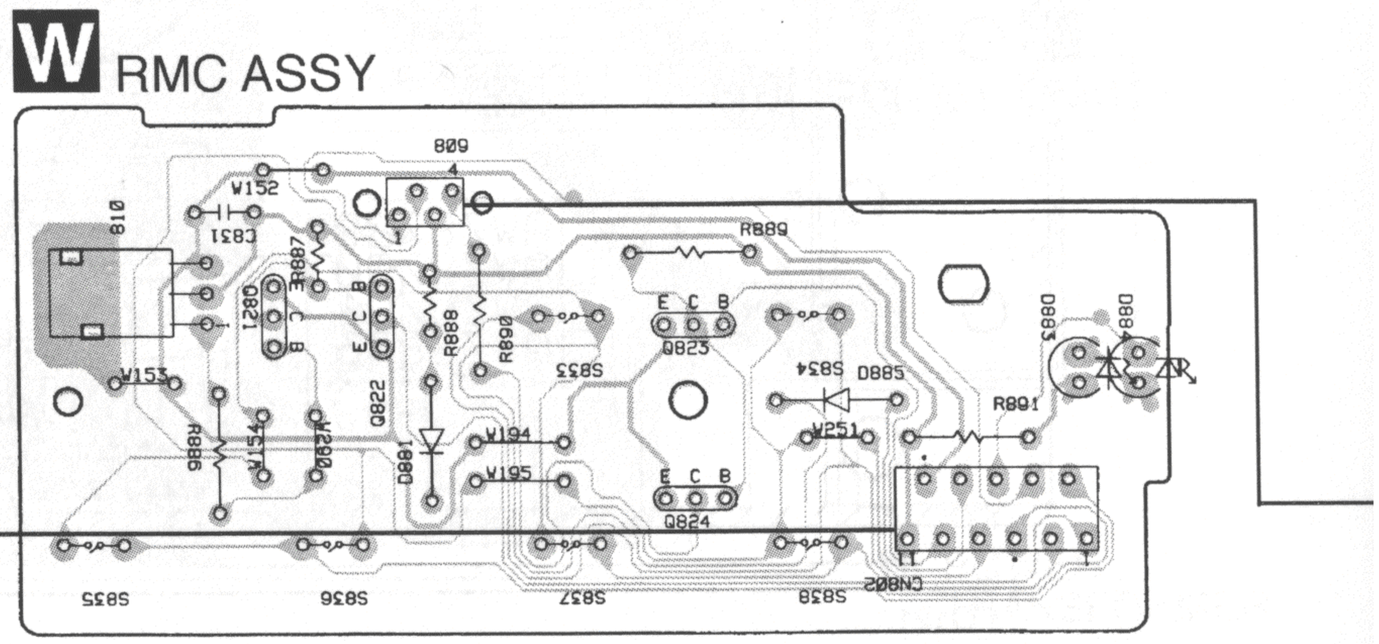
1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection of the power transformer primary taps.
4. Stick a line voltage label on the rear panel.

Part No.	Description
AAX–193	220V label
AAX–192	240V label



4.15 FL-UCOM ASSY, RMC ASSY, POWER SWITCH ASSY, KEY ASSY AND ROTALY SW ASSY





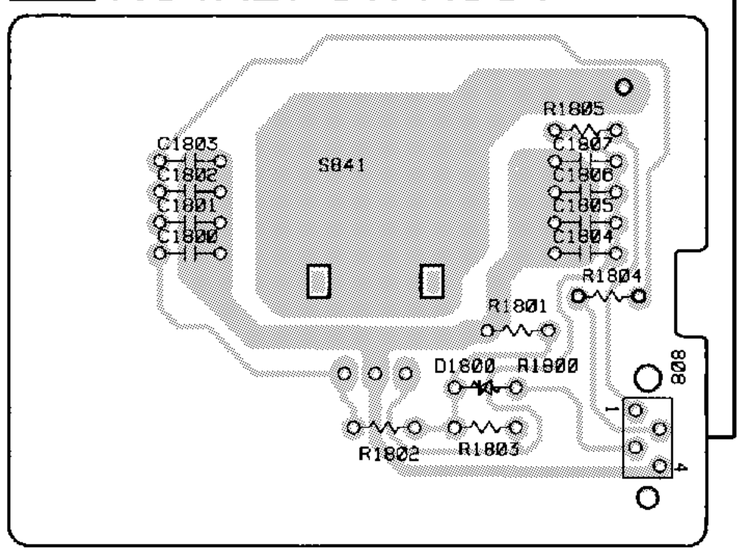
SIDE A

I CN651

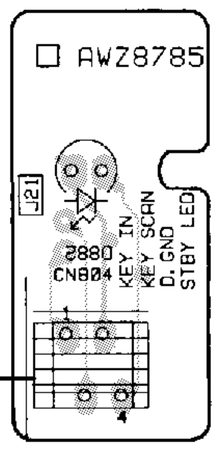
G CN1656

Q812
Q813

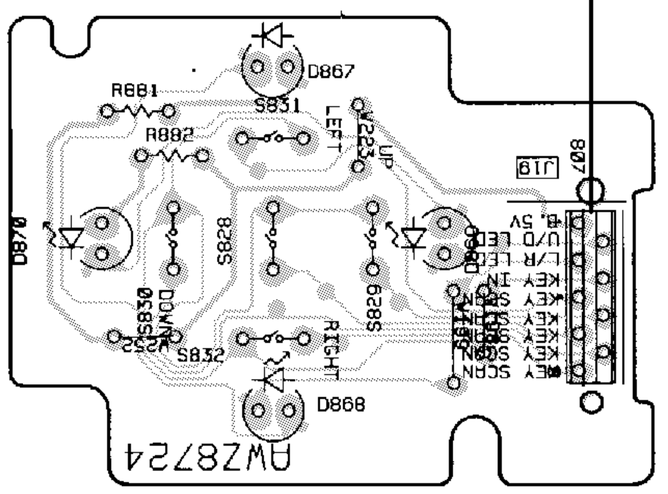
Z ROTALY SW ASSY



X POWER SWITCH ASSY



Y KEY ASSY



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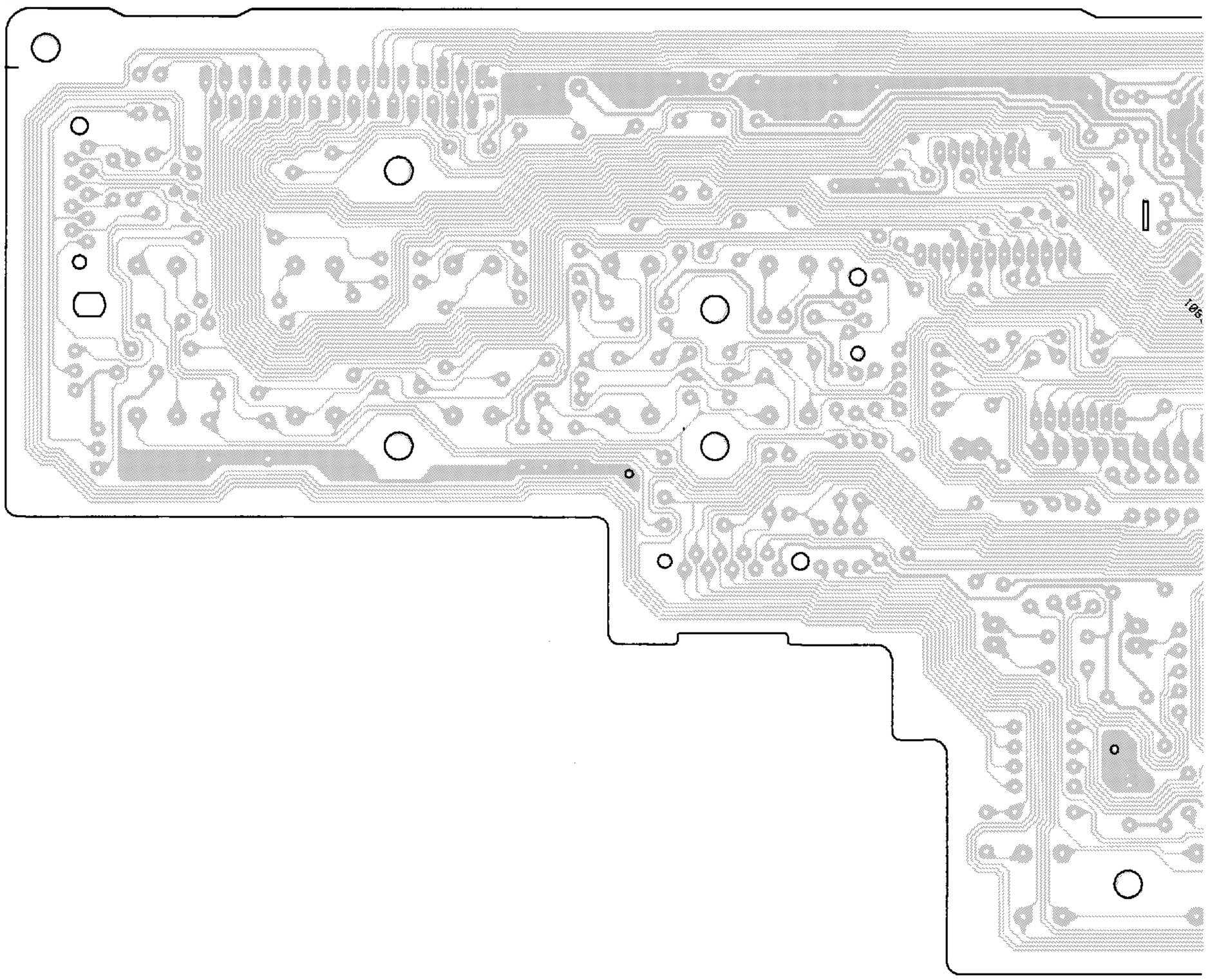
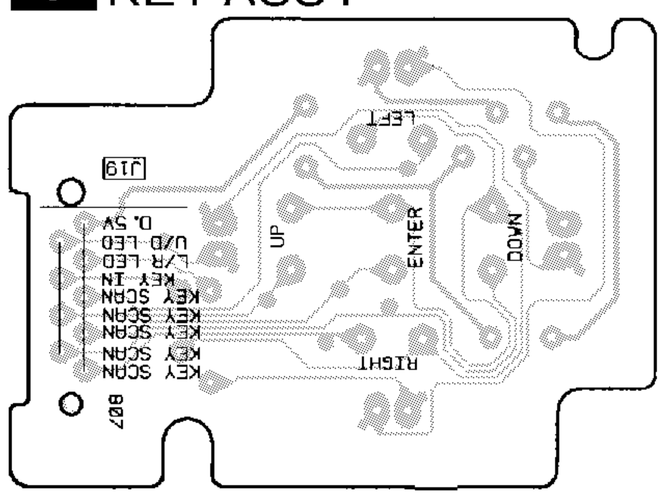
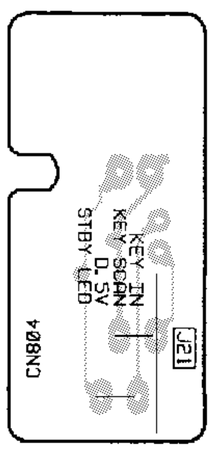
V FL-UCOM ASSY



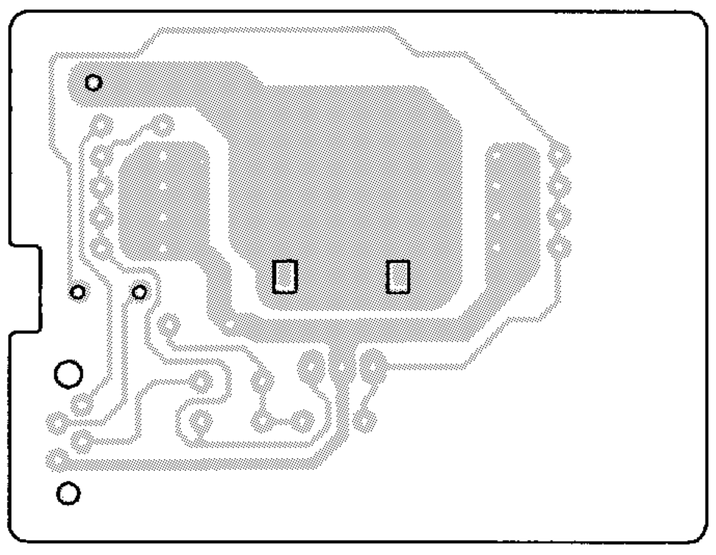
Y KEY ASSY



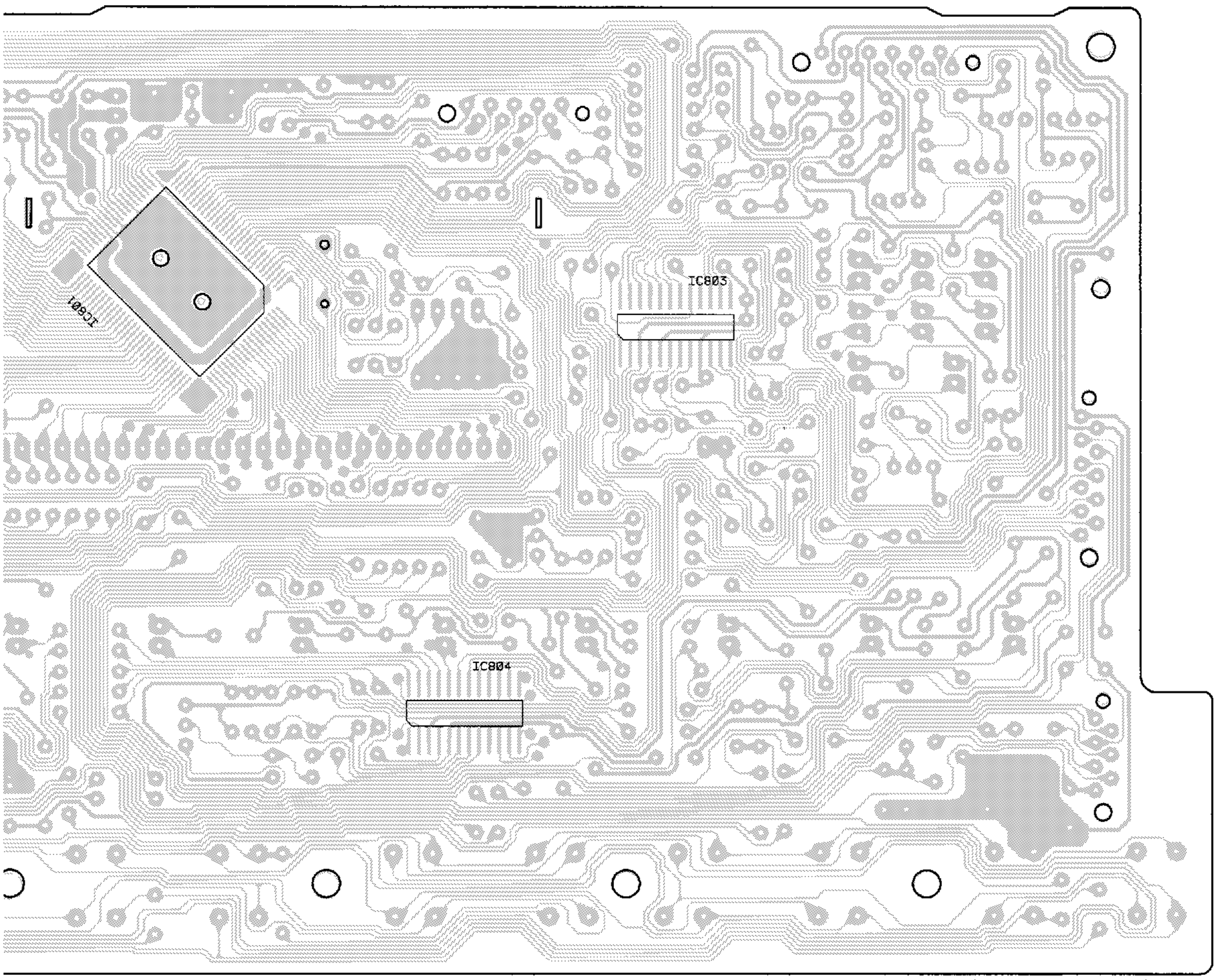
X POWER SWITCH ASSY



Z ROTALY SW ASSY

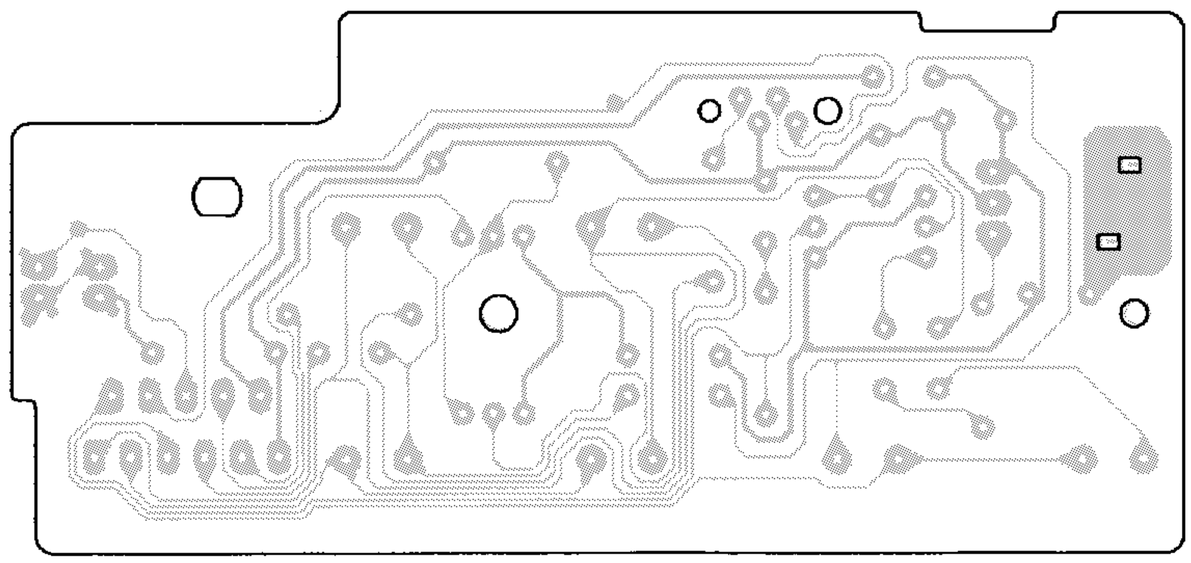


SIDE B



IC801 IC804 IC803

W RMC ASSY



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5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	→	*56 × 10¹*	→	*561*	*RD1/4PU 5 6 1 J*
47kΩ	→	*47 × 10³*	→	*473*	*RD1/4PU 4 7 3 J*
0.5Ω	→	*R50*			*RN2H R 5 0 K*
1Ω	→	*1R0*			*RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	→	*562 × 10¹*	→	*5621*	*RN1/4PC 5 6 2 1 F*

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.		Remarks
		HY TYPE	HV TYPE	
NSP	POWER AMP ASSY	AWK7364	AWK7364	
	├ VOLTAGE AMP ASSY	AWZ8716	AWZ8716	
	└ CURR DRIVE ASSY	AWZ8717	AWZ8717	
NSP	SMALL SIG. ASSY	AWK7387	AWK7387	
	├ AUDIO ASSY	AWZ8764	AWZ8764	
	├ AUDIO/VIDEO ASSY	AWZ8767	AWZ8767	
	├ VIDEO ASSY	AWZ8770	AWZ8770	
	├ S-VIDEO ASSY	AWZ8771	AWZ8771	
	└ PRE-OUT & SR ASSY	AWZ8775	AWZ8775	
NSP	CONTROL ASSY	AWK7389	AWK7389	
NSP	├ KEY ASSY	AWZ8724	AWZ8724	
NSP	├ ROTARY SW ASSY	AWZ8726	AWZ8726	
	├ FL-UCOM ASSY	AWZ8780	AWZ8780	
NSP	├ RMC ASSY	AWZ8783	AWZ8783	
NSP	└ POWER SWITCH ASSY	AWZ8785	AWZ8785	
NSP	POWER SUPPLY ASSY	AWK7390	AWK7407	
	├ POWER SW ASSY	AWZ8731	AWZ8731	
	├ SP TERMINAL ASSY	AWZ8789	AWZ8789	
	├ PRIMARY ASSY	AWZ8791	AWZ8873	
	├ TRANS TERMINAL ASSY	AWZ8800	AWZ8800	
NSP	├ DIODE ASSY	AWZ8838	AWZ8838	
	└ POWER SUPPLY ASSY	AWZ8847	AWZ8847	
NSP	CONNECTION ASSY	AWK7404	AWK7404	
	├ E VR ASSY	AWZ8033	AWZ8033	
	├ MASTER VR ASSY	AWZ8034	AWZ8034	
NSP	├ CONNECTION ASSY	AWZ8732	AWZ8732	
	├ REGULATOR (1) ASSY	AWZ8735	AWZ8735	
NSP	├ REGULATOR (3) ASSY	AWZ8819	AWZ8819	
	├ REGULATOR (2) ASSY	AWZ8871	AWZ8871	
	└ V-AMP ASSY	AWZ8874	AWZ8874	
	LIMITTER ASSY	AWK7406	AWK7406	
	DOLBY DIGITAL ASSY	AWX7038	AWX7038	

■ CONTRAST OF PCB ASSEMBLIES

PRIMARY ASSY

AWZ8873 and AWZ8791 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ8791	AWZ8873	
	H125, H126 Holder	RKR1003	Not used	

■ PCB PARTS LIST FOR HY TYPE

Mark	No.	Description	Parts No.

N VOLTAGE AMP ASSY

SEMICONDUCTORS

	IC901 – IC903	NJM4558DX
	Q916 – Q920	2SA1048
	Q1062, Q943, Q944	2SA965
	Q901 – Q910, Q921 – Q925	2SA970
	Q936 – Q940	2SA970
	Q1061, Q941, Q942	2SC2235
	Q926 – Q935, Q947	2SC2240
	Q911 – Q915, Q945	2SC2458
	Q946	DTA124ES
	D911 – D925, D927 – D930	1SS355
	D951 – D960	1SS355
	D935	UDZ16B
	D931, D932, D938, D939	UDZ22B
	D933, D934, D936, D937	UDZ24B
	D941 – D945	UDZ6.8B
	D946 – D950	UDZ8.2B

CAPACITORS

	C1071 – C1080	CCCSL181K2H
	C951 – C960	CCCSL560K2H
	C966 – C970	CCCSL5R0C2H
	C981 – C985	CCSQCH101J50
	C1089, C1090	CEAS101M50
	C971	CEAS470M2A
	C931 – C935, C941 – C945	CEJA100M50
	C961 – C965	CEJA101M16
	C1086, C1087	CEJA1R0M50
	C1081 – C1085, C1101 – C1105	CEJA470M16
	C946 – C950	CKSQYB182K50
	C936 – C940	CKSQYB221K50
	C976 – C980	CKSQYB222K50
	C1088	CKSQYF223Z50

RESISTORS

	R1201, R1202	RD1/4LMF472J
	R1126 – R1130	RD1/4MUF473J
	R1153, R1154	RD1/4MUF4R7J
	Other Resistors	RS1/10S□□□J

OTHERS

901	CABLE HOLDER(6P)	51052–0600
902	CABLE HOLDER(5P)	51063–0505
903	CABLE HOLDER(15P)	51063–1505
CN904	PLUG 3–P	KM250MA3
CN903	14P SOCKET	KP200TA14L
CN901	CONNECTOR(15P)	KPE15
	PCB BINDER	VEF1040

O CURR DRIVE ASSY

SEMICONDUCTORS

	IC1051, IC1052 (5A/125V)	AEK7019
	Q1051 – Q1055	2SA970
	Q1056, Q1057	2SC2458
	D1051 – D1070	1SS355

COILS AND FILTERS

	L1051 – L1055(1.5µH)	ATH1053

CAPACITORS

	C1066	CEANP101M10
	C1091, C1092	CEAS470M63
	C1051 – C1055	CEASR22M50
	C1056 – C1065	CFTXA224J50

RESISTORS

	R1066 – R1075 (0.1Ω/2W)	ACN7027
	R1096 – R1100	RS1LMF4R7J
	VR1051–VR1055 (2.2kΩ/0.1W)	RCP1019
	Other Resistors	RS1/10S□□□J

OTHERS

1051	CABLE HOLDER(15P)	51063–1505
CN1051	14P PLUG	KM200TA14
KN1001	EARTH METAL FITTING	VNF1084

A AUDIO ASSY

SEMICONDUCTORS

	IC305	BU4094BCF
	IC301	M5220P
	IC302	NJM4558DX
	IC303	TC9164AN
	Q301	2SC2458

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	L301 – L304		LCTA181J3225
CAPACITORS			
	C301 – C310, C323, C324		CCSQCH101J50
	C335, C336, C349, C350		CCSQCH101J50
	C1344, C337, C344		CCSQCH102J50
	C315, C316		CCSQCH151J50
	C311, C312, C339, C340		CCSQCH221J50
	C313, C314		CEAS100M50
	C333, C334		CEAS101M25
	C329 – C332		CEAS2R2M50
	C327, C328		CEAS331M25
	C317, C318, C341, C342		CEAS470M25
	C345, C346		CKSQYB103K50
	C321, C322		CQMA242J50
	C319, C320		CQMA822J50
RESISTORS			
	R342, R343		RD1/4PU102J
	R1301, R1302		RD1/4PU331J
		Other Resistors	RS1/10S□□□J
OTHERS			
	302, 303	PIN JACK(4P)	AKB7070
	301	PIN JACK(6P)	AKB7073
	CN302	18P SOCKET	KP200TA18L
	CN303	19P SOCKET	KP200TA19L

B AUDIO/VIDEO ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC351		TC9162AN
CAPACITORS			
	C351 – C364		CCSQCH101J50
	C365		CCSQCH102J50
	C366, C367		CKSQYB103K50
RESISTORS			
		All Resistors	RS1/10S□□□J
OTHERS			
	360	CABLE HOLDER(3P)	51063 – 0305
	351, 352	PIN JACK(6P)	AKB7073
	J38	JUMPER WIRE	D15A03–100–2651
	CN351	PLUG 3 – P	KM250MA3
	CN353	17P SOCKET	KP200TA17L
	CN352	9P SOCKET	KP200TA9L

D VIDEO ASSY

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC406		BU4094BCF
	IC408		LA7213
	IC405		LA7951
	IC403		MM1067XD
	IC402		NJM2534L
	IC404		PD6178A
	IC409		UPC78L05J
	Q403 – Q409, Q411, Q412		2SA1048
	Q401, Q402, Q413, Q414		2SC2458
	Q410, Q415, Q475		DTC124ES
	D401 – D405		1SS355
	D406		HSS104 – 02
COILS AND FILTERS			
	L401		LCTA220J3225
CAPACITORS			
	C431, C468		CCSQCH101J50
	C430, C457		CCSQCH102J50
	C436, C437		CCSQCH150J50
	C423		CCSQCH221J50
	C433, C473		CCSQCH330J50
	C428		CCSQCH471J50
	C425, C426		CCSQCH561J50
	C444, C448, C456, C461		CCSQCH5R0C50
	C471, C472		CCSQCH5R0C50
	C418, C450, C454, C465, C466		CEAS100M50
	C421, C424, C427		CEAS1R0M50
	C439		CEAS3R3M50
	C401 – C404, C412, C415, C417		CEAS470M25
	C435, C440 – C442, C446, C458		CEAS470M25
	C462, C467, C469		CEAS470M25
	C445, C449, C464		CEAS471M10
	C429		CEASR47M50
	C413, C414, C416, C419, C434		CKSQYB103K50
	C438, C443, C447, C459, C463		CKSQYB103K50
	C451 – C453, C455, C470		CKSQYB104K25
	C422		CKSQYB332K50
	C420		CKSQYB473K50
RESISTORS			
	R459		RD1/2PM221J
	R441, R446		RD1/2PM331J
	R462		RD1/2PM680J
	R469, R470		RD1/4PU101J
	R475		RD1/4PU223J
	R467		RD1/4PU331J
	R468		RD1/4PU472J
		Other Resistors	RS1/10S□□□J
OTHERS			
	401	CABLE HOLDER(14P)	51063 – 1405
	402, 405	PIN JACK(2P)	AKB7071
	403	3P RCA PINJACK	AKB7077
	X402	CRYSTAL RESONATOR	ASS1056
	X401	CERAMIC RESONATOR (503kHz)	ASS1112
	CN402	10P SOCKET	KP200TA10L

Mark	No.	Description	Parts No.

E S-VIDEO ASSY

SEMICONDUCTORS

	IC504, IC505	LA7951
	IC501, IC502	NJM2534L
	IC503	TC4051BP
	Q501 – Q506, Q509	2SA1048
	Q508, Q510, Q514, Q515	2SC2458
	D501 – D504	1SS355

CAPACITORS

	C536, C538, C540, C542, C544	CCSQCH5R0C50
	C546	CCSQCH5R0C50
	C1501, C1503, C1505, C1507, C1509	CEAS470M25
	C501, C505, C509, C513, C518	CEAS470M25
	C520, C521, C528, C529	CEAS470M25
	C533, C534, C549, C550	CEAS470M25
	C537, C539, C541	CEAS471M10
	C1502, C1504, C1506, C1508, C1510	CKSQYB103K50
	C504, C508, C512, C516, C517	CKSQYB103K50
	C519, C522, C523, C525, C526	CKSQYB103K50
	C530, C535, C548	CKSQYB103K50
	C502, C506, C511, C515, C524	CKSQYB104K25
	C531, C543, C545, C547	CKSQYB104K25
	C503, C507, C510, C514	CKSQYB473K50

RESISTORS

	R1504, R541	RD1/2PM221J
	R1501, R532, R537, R546	RD1/2PM331J
	R1516	RD1/4PU103J
	Other Resistors	RS1/10S□□□J

OTHERS

501	CABLE HOLDER(9P)	51063 – 0905
CN505	SOCKET	AKP7011
CN503, CN504	SOCKET	AKP7012
CN502	12P SOCKET	KP200TA12L
361	PCB BINDER	VEF1040

C PRE-OUT & SR ASSY

SEMICONDUCTORS

	Q552	2SA1048
	Q551	2SC2458
	Q555 – Q560	2SC2878
	Q554	DTC124ES
	D551, D554, D555	1SS355

COILS AND FILTERS

	L551 – L556	LCTA221J3225

CAPACITORS

	C551 – C556, C558	CCSQCH101J50
	C557	CEAS101M25

RESISTORS

	R554	RD1/4PU102J
	R578	RD1/4PU103J
	Other Resistors	RS1/10S□□□J

Mark	No.	Description	Parts No.

OTHERS

557	CABLE HOLDER(15P)	51063 – 1505
556	PIN JACK(6P)	AKB7088
CN553	JACK	AKN1006
CN558	PLUG 3–P	KM250MA3
CN551	5P SOCKET	KP200TA5L
CN554	CONNECTOR(4P)	KPE4

Y KEY ASSY

SEMICONDUCTORS

	D867 – D870	SLR–342VRT31

SWITCHES AND RELAYS

	S828 – S832	VSG1008

RESISTORS

	All Resistors	RD1/4PU□□□J

OTHERS

807	CABLE HOLDER(9P)	51063 – 0905

Z ROTARY SW ASSY

SEMICONDUCTORS

	D1800	HSS104 – 02

SWITCHES AND RELAYS

	S841	ASX7010

CAPACITORS

	C1800, C1804	CKPUYF473Z16

RESISTORS

	All Resistors	RD1/4PU□□□J

OTHERS

808	CABLE HOLDER(4P)	51063 – 0405

V FL-UCOM ASSY

SEMICONDUCTORS

	IC803, IC804	M66311FP
	IC801	PDG191A
	IC802	S–24C16ADP
	Q805 – Q811	DTA124ES
	Q801 – Q804, Q814	DTC124ES
	D801, D802, D804, D807 – D813	HSS104 – 02
	D822, D824 – D830, D839	HSS104 – 02
	D844, D845, D861 – D866	HSS104 – 02
	D814, D831 – D838, D840	SLR – 342VRT31
	D815 – D821	SLR – 342YCT31

COILS AND FILTERS

	L801	LAU220J

SWITCHES AND RELAYS

	S811 – S827, S850	VSG1008

Mark	No.	Description	Parts No.
CAPACITORS			
	C807		CEAS101M10
	C805		CEAS1R0M50
	C808		CEAS220M50
	C815		CEJA100M50
	C801, C804		CEJA221M10
	C802, C803		CKCYF473Z50
	C821 – C824, C832 – C835		CKPUYB102K50
	C806, C809, C810, C816 – C818		CKPUYF473Z16
	C828, C838		CKPUYF473Z16
	C837		CKPUYX222M16
RESISTORS			
	R812		RA11T472J
	R811		RA6T472J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	815	CABLE HOLDER(4P)	51063 – 0405
	802	CABLE HOLDER(7P)	51063 – 0705
	801, 804, 806	CABLE HOLDER(9P)	51063 – 0905
	805	CABLE HOLDER(11P)	51063 – 1105
	803	CABLE HOLDER(12P)	51063 – 1205
	CN801	29P CONNECTOR	52044 – 2945
	V801	FL TUBE	AAV7037
	X801	CERAMIC RESONATOR (7.70MHz)	ASS1055

W RMC ASSY

SEMICONDUCTORS			
	Q821, Q822		2SC2458
	Q823, Q824		DTC124ES
	D881, D885		HSS104 – 02
SWITCHES AND RELAYS			
	S835		VSG1008
CAPACITORS			
	C831		CKCYF103Z50
RESISTORS			
		All Resistors	RD1/4PU□□□J
OTHERS			
	809	CABLE HOLDER(4P)	51063 – 0405
	810	REMOTE RECEIVER UNIT	GP1U28X
	CN802	CONNECTOR(11P)	KPE11

X POWER SWITCH ASSY

SEMICONDUCTORS			
	D882		SLR – 342VRT31
OTHERS			
	CN804	CONNECTOR(4P)	KPE4

UB POWER SW ASSY

SWITCHES AND RELAYS			
	S141		ASG1035
CAPACITORS			
⚠	C141	(3300pF/250V)	ACG7017

Mark	No.	Description	Parts No.
OTHERS			
	Y127, Y128	BOARDIN READ WIRE	ADX7207

Q SP TERMINAL ASSY

SEMICONDUCTORS			
	Q271 – Q274		2SC2240
	Q203		2SC4793
	Q201		DTA124ES
	Q202		DTC143ES
	D201, D202		D3SBA20(B)
	D271 – D278		HSS104 – 02
	D211		MTZJ24B
	D203, D204		S5688G
COILS AND FILTERS			
	L271 – L277 (1µH)		ATH–133
SWITCHES AND RELAYS			
	S272		ASH1027
	RY271 – RY275		ASR1035
CAPACITORS			
	C202, C204		CEAS222M25
	C205		CEAS470M50
	C203		CEAS472M16
	C201		CEAS472M25
	C271 – C277		CQMXA562J2A
	C278 – C280		CQMXA104J2A
	C281 – C287		CQMXA562J2A
RESISTORS			
	R204		RD1/2PM561J
	R291		RD1/4PM181J
	R271, R274, R279		RS2LMF122J
	R201, R202		RS2LMF470J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	272	CABLE HOLDER(4P)	51063 – 0405
	CN278	SPEAKER TERMINAL 8 – P	AKE7044
	CN279	SPEAKER TERMINAL 6 – P	AKE7045
	CN276	CONNECTOR(10P)	KPC10
	CN280	CONNECTOR(5P)	KPC5
	CN273	CONNECTOR(12P)	KPE12
	CN277	CONNECTOR(14P)	KPE14
	CN271	CONNECTOR(4P)	KPE4
	CN275	CONNECTOR(5P)	KPE5
	CN274	CONNECTOR(6P)	KPE6
	CN272	CONNECTOR(7P)	KPE7

S PRIMARY ASSY

SEMICONDUCTORS			
	Q121		DTC143ES
	D122, D124		HSS104 – 02
	D125		MTZJ5.1A
	D123		MTZJ5.6A
	D121		S5688G

Mark	No.	Description	Parts No.
COILS AND FILTERS			
	L121	(0.8µH/250V)	ATF – 151
TRANSFORMERS			
⚠	T121		ATT1193
SWITCHES AND RELAYS			
⚠	RY121		ASR1027
CAPACITORS			
⚠	C121 – C123	(10000pF/250V)	ACG7020
	C125		CEAS102M16
	C126		CEAS470M25
	C124		CKCYF103Z50
RESISTORS			
	R123		RD1/2PM270J
	R122		RS2LMF121J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	122	CABLE HOLDER(4P)	51063 – 0405
	H121, H122, H125, H126	HOLDER	RKR1003

T TRANS TERMINAL ASSY

SEMICONDUCTORS			
	IC103	(3A, 125V)	AEK7015
	IC101, IC102	(5A, 125V)	AEK7019
	D101 – D104		S5688G
CAPACITORS			
	C103	(1µF/100V)	ACH1237
	C106, C107		CEAS221M25
	C108, C109		CEAS221M50
	C101		CGCYX104M25
RESISTORS			
		All Resistors	RD1/4PM□□□J
OTHERS			
	103	CABLE HOLDER(3P)	51052 – 0300
	101, 102	CABLE HOLDER(5P)	51052 – 0500

UA DIODE ASSY

CAPACITORS			
	C191		CQMA473K2E
RESISTORS			
		All Resistors	RD1/4PM□□□J

R POWER SUPPLY ASSY

SEMICONDUCTORS			
	Q151		2SA970
	Q152		2SC2240
	Q153		DTC143ES
	D159		HSS104 – 02
	D157		MTZJ24B
	D158		MTZJ6.8A
	D153 – D156		S5688G

Mark	No.	Description	Parts No.
CAPACITORS			
	C155	(0.01µF/150V)	ACG1005
	C152, C153	(22000µF/56V)	ACH7068
	C169, C170		CCCSL101J50
	C159		CEAS101M25
	C160		CEAS101M50
	C157		CEAS102M63
	C158		CEAS221M50
	C171		CEAS470M25
	C161, C166 – C168		CGCYX104M25
	C172		CGCYX473M25
	C162, C163		CKCYB392K50
	C154		CQMXA222J2A
	C156	(2200µF/63V)	RCH1144
RESISTORS			
	R171, R172		RD1/2PM682J
	R151		RD1/4PM100J
	R152		RS1LMF152J
	R158, R159		RS1LMF331J
	R160, R161		RS2LMF331J
		Other Resistors	RD1/4PU□□□J
OTHERS			
	152	CABLE HOLDER(7P)	51063 – 0705
	153	CABLE HOLDER(12P)	51063 – 1205
	CN156	PIN JACK(4P)	AKX7007
	CN154	PLUG 8–P	KM250MA8
	CN151	CONNECTOR(5P)	KPC5
	CN155	JUMPER CONNECTOR	KPC6
	CN152	CONNECTOR(12P)	KPE12
	CN153	CONNECTOR(7P)	KPE7
	JA151	HEADPHONE JACK	RKB1014
	151	GROUND PLATE	VNF – 091
	154	PCB BINDER	VEF1040

F E VR ASSY

SEMICONDUCTORS			
	IC601, IC603 – IC606		NJM4558DX
	IC615		NJM78L06A
	IC616		NJM79L06A
	IC607		TC9163AN
	IC608 – IC610		TC9299P
	IC602, IC611, IC612		UPC4570C
	IC613, IC614		UPC4570G2
	Q601, Q602		2SC2458
	Q603, Q604		2SC2878
	Q605		DTA124ES
	D601		1SS355
	D603 – D606		HSS104 – 02
	D602		MTZJ5.1B
CAPACITORS			
	C667, C668		CEAS101M25
	C1601		CEAS1R0M50
	C1602, C1603		CEAS2R2M50
	C697, C698		CEAS470M25
	C607, C608, C616, C633, C634		CEAS4R7M50

Mark	No.	Description	Parts No.
	C653 – C656, C659, C660		CEAS4R7M50
	C683 – C694		CEAS4R7M50
	C661, C664, C671, C678		CKSQYB102K50
	C609, C610, C617, C618		CKSQYB103K50
	C635, C636, C639, C640		CKSQYB103K50
	C643, C644, C647, C648		CKSQYB103K50
	C657, C658, C665, C666		CKSQYB103K50
	C672, C673, C679, C680		CKSQYB103K50
	C695, C696		CKSQYB103K50
	C1605, C1606		CKSQYB152K50
	C651, C652, C662, C663		CKSQYF473Z50
	C669, C670, C676, C677		CKSQYF473Z50
	C1607, C1608		CQMA104J50
	C1609, C1610		CQMA332J50
	C621 – C624		CQPA103G2A
	C601 – C604, C613, C614		CQPA122G2A
	C645, C646, C649, C650		CQPA152G2A
	C625, C626		CQPA182G2A
	C605, C606, C615		CQPA222G2A
	C627, C628		CQPA271G2A
	C637, C638, C641, C642		CQPA272G2A
	C629 – C632		CQPA273G2A

RESISTORS

R1634		RD1/4PU100J
R1613, R1614, R637, R638		RN1/4PC1332F
R633, R634		RN1/4PC1822F
R621, R622		RN1/4PC2551F
R645, R646		RN1/4PC3242F
R625, R626		RN1/4PC3322F
R629, R630		RN1/4PC3572F
R631, R632		RN1/4PC4021F
R643, R644		RN1/4PC4022F
R639, R640		RN1/4PC5111F
R641, R642		RN1/4PC5491F
R627, R628		RN1/4PC5762F
R697, R698		RN1/4PC7501F
R623, R624		RN1/4PC8250F
R635, R636		RN1/4PC9311F
R607, R608, R616		RS1/10S1002F
R605, R606, R615		RS1/10S1802F
R603, R604, R614		RS1/10S2201F
R609, R610, R617		RS1/10S4701F
R601, R602, R613		RS1/10S6801F
R695, R696		RS1LMF101J
	Other Resistors	RS1/10S□□□J

OTHERS

610	CABLE HOLDER(14P)	51063–1405
CN609	11PJUMPER CONNECTOR	52147–1110
CN608	15PJUMPER CONNECTOR	52147–1510
CN603	10P PLUG	KM200TA10
CN604	12P PLUG	KM200TA12

Mark	No.	Description	Parts No.
	CN606, CN612	13P PLUG	KM200TA13
	CN602	17P PLUG	KM200TA17
	CN601	18P PLUG	KM200TA18
	CN605	5P PLUG	KM200TA5
	CN607	7P PLUG	KM200TA7
	CN611	PLUG 5 – P	KM250MA5
	CN613	JUMPER CONNECTOR 3 – P	KPC3
	KN601	EARTH METAL FITTING	VNF1084

G MASTER VR ASSY

SEMICONDUCTORS

IC1656		NJM4558DX
IC1652 – IC1654		UPC4570C
Q1657, Q1658		2SA1115
Q1659, Q1660		2SC2603
Q1651 – Q1656		2SC2878
Q1663, Q1664		2SK246
Q1661		DTA124ES
Q1662, Q1665		DTC124ES
D1659, D1660, D1663 – D1666		1SS355
D1652, D1654, D1661		HSS104 – 02
D1656		MTZJ5.1A

CAPACITORS

C1701 – C1706		CCSQCH121J50
C1678		CCSQCH331J50
C1677, C1679		CCSQCH470J50
C1675, C1676		CCSQCH681J50
C1696		CEANP100M16
C1694		CEAS100M25
C1663 – C1668, C1681 – C1685		CEAS100M50
C1697		CEAS220M50
C1699, C1700		CEAS470M25
C1686		CEAS470M50
C1720		CEAS471M6R3
C1688		CEAS4R7M50
C1712		CGCYX104M25
C1690, C1692		CKSQYB103K50
C1669 – C1674		CKSQYB104K25
C1680		CKSQYB222K50
C1695		CKSQYF104Z50
C1715, C1716		CQMA471J50
C1661		CQMA472J50

RESISTORS

R1734		RD1/4PU331J
VR1651	(50kΩ–A5×4+100kΩ–B+50)	ACX7031
VR1652	(47kΩ/0.1W)	PCP1031
	Other Resistors	RS1/10S□□□J

OTHERS

CN1655	13P SOCKET	KP200TA13L
CN1654	7P SOCKET	KP200TA7L
CN1652, CN1653	CONNECTOR(15P)	KPE15
CN1650	CONNECTOR(3P)	KPE3
CN1651	CONNECTOR(5P)	KPE5
CN1656, CN1657	CONNECTOR(9P)	KPE9

Mark	No.	Description	Parts No.

I CONNECTION ASSY

SEMICONDUCTORS

	Q651, Q652		DTC124ES

RESISTORS

		All Resistors	RS1/10S□□□J

OTHERS

	CN651	29P CONNECTOR	52044 – 2945
	CN652	19P PLUG	KM200TA19
	CN653	9P PLUG	KM200TA9
	CN656	CONNECTOR(10P)	KPE10
	CN654	CONNECTOR(14P)	KPE14
	CN657	CONNECTOR(3P)	KPE3
	CN655	CONNECTOR(9P)	KPE9

J REGULATOR (1) ASSY

SEMICONDUCTORS

⚠	IC235	(500mA/125V)	AEK7005
	IC231		NJM78M12FA
	IC234		NJM79M15FA
	IC233		PQ20RV1E
	D231		HSS104 – 02

CAPACITORS

	C232		CEAS101M25
	C236, C238		CEAS470M25
	C235		CEASR33M50
	C231, C239		CKCYB103K50

RESISTORS

		All Resistors	RD1/4PU□□□J

OTHERS

	231	CABLE HOLDER(10P)	51052 – 1000

L REGULATOR (3) ASSY

SEMICONDUCTORS

	IC253, IC254		PQ20RV1E
	D251, D252		HSS104 – 02

CAPACITORS

	C256, C258		CEAS470M25
	C255, C257		CEASR33M50

RESISTORS

	R259		RN1/4PC8200F
	R260		RN1/4PC4700F
		Other Resistors	RD1/4PU□□□J

OTHERS

	252	CABLE HOLDER(5P)	51063 – 0505

K REGULATOR (2) ASSY

SEMICONDUCTORS

	IC255, IC256	(315mA/125V)	AEK7003
	IC257, IC258	(125mA/125V)	AEK7020
	IC251		NJM78M12FA
	IC252		NJM78M56FA
	Q251, Q252		2SA1837

Mark	No.	Description	Parts No.

CAPACITORS

	C252		CEAS101M25
	C254		CEAS470M25
	C251, C253		CKCYB103K50

RESISTORS

	R251		RS2LMF100J
	R255		RS2LMF270J
	R254		RS2LMF390J
	R252		RS2LMF6R8J

OTHERS

	251	CABLE HOLDER(6P)	51063 – 0605
	8	PCB BINDER	VEF1040

M V-AMP ASSY

SEMICONDUCTORS

	IC701		UPC4570G2
	Q703 – Q706		2SA970
	Q701, Q702, Q707, Q708		2SC2240
	D701 – D708		1SS355

CAPACITORS

	C701, C702		CCSQCH221J50
	C703, C704		CCSQCH470J50
	C705, C706		CEAS4R7M50
	C707, C708, C710, C711		CKSQYB103K50

RESISTORS

		All Resistors	RS1/10S□□□J

OTHERS

	CN701	13P SOCKET	KP200TA13L

P LIMITTER ASSY

SEMICONDUCTORS

	IC1205, IC1206		NJM2058D
	IC1204		NJM4558DX
	IC1201–IC1203		UPC4570C
	Q1201 – Q1205		2SC2878
	D1201 – D1205, D1211 – D1215		HSS104 – 02
	D1206 – D1210, D1216 – D1220		HZS2CLL

CAPACITORS

	C1216 – C1225		CCCCH220J50
	C1201 – C1205		CEAS100M50
	C1231 – C1235		CEJA4R7M35
	C1206 – C1211		CFTXA104J50

RESISTORS

		All Resistors	RD1/4PU□□□J

OTHERS

	1202	CABLE HOLDER(3P)	51063 – 0305
	1201	CABLE HOLDER(15P)	51063 – 1505
	CN1201	CONNECTOR(15P)	KPE15

H DOLBY DIGITAL ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC9401, IC9431, IC9461		AK4319 – VM
	IC9251		AK5340 – VS
	IC9121		CD0004AF
	IC9361		KM62V256CLG – 7L
	IC9091		LH52256AN – 70LL
	IC9301		MB86342A
	IC9201, IC9221		NJM2100M
	IC9041, IC9411, IC9441, IC9471, IC9601		NJM4558MD
	IC9621, IC9641		NJM4558MD
	IC9501		PA4025A
	IC9071		PM4007A
	IC9371		TC74HCT244AF
	IC9103		TC74HCU04AF
	IC9381		TC74LVX244FS
	Q9007, Q9241, Q9401, Q9431, Q9461		2PB709A
	Q9003, Q9031, Q9032, Q9242, Q9402		2PD601A
	Q9432, Q9462		2PD601A
	Q9201, Q9221, Q9601, Q9611, Q9621		2SC3326
	Q9631, Q9641, Q9651		2SC3326
	Q9001, Q9002, Q9004 – Q9006		2SC3802K
	Q9304		DTA124EK
	Q9251, Q9301 – Q9303		DTC124EK
	D9401, D9431		1SS181
	D9002		1SS355
	D9001		KV1851

COILS AND FILTERS

Mark	No.	Description	Parts No.
	F9001	(2.88MHz)	ATF7001
	F9301, F9302, F9371		ATF7013
	L9003	(68μH)	ATH7001
	L9301, L9801 – L9811		ATL7001
	L9302		LCTBR47K2125
	L9200, L9201, L9221, L9252 – L9254		OTL1040
	L9402, L9432, L9462, L9601, L9611		OTL1040
	L9621, L9631, L9641, L9651		OTL1040
	L9004, L9005, L9071, L9091, L9103		VTL1019
	L9108, L9121, L9251, L9361, L9371		VTL1019
	L9380, L9401, L9431, L9461, L9661		VTL1019

CAPACITORS

Mark	No.	Description	Parts No.
	C9105, C9122, C9126, C9159, C9160		CCSQCH101J50
	C9255, C9263, C9302, C9309, C9312		CCSQCH101J50
	C9315, C9318, C9321, C9361, C9381		CCSQCH101J50
	C9401, C9406, C9431, C9436, C9461		CCSQCH101J50
	C9466		CCSQCH101J50
	C9511, C9521, C9541, C9551, C9571		CCSQCH102J50
	C9606, C9616, C9626, C9636, C9646		CCSQCH102J50
	C9656		CCSQCH102J50
	C9125, C9203, C9223, C9305, C9306		CCSQCH220J50
	C9412 – C9414, C9422 – C9424		CCSQCH221J50
	C9442 – C9444, C9452 – C9454		CCSQCH221J50
	C9472 – C9474, C9482		CCSQCH221J50
	C9057		CCSQCH270J50
	C9151, C9152, C9512, C9522, C9542		CCSQCH271J50
	C9552, C9572, C9702, C9704, C9709		CCSQCH271J50
	C9603, C9613, C9623, C9633, C9643		CCSQCH391J50
	C9705		CCSQCH470J50
	C9326		CCSQCH471J50
	C9307, C9308, C9375		CCSQCH560J50
	C9007		CCSQCH750J50
	C9053		CEANP470M25
	C9257, C9301		CEAS471M6R3
	C9107, C9128, C9201, C9221, C9403		CEV100M16
	C9405, C9408, C9433, C9435, C9438		CEV100M16
	C9463, C9465, C9468, C9502, C9504		CEV100M16
	C9602, C9605, C9612, C9615, C9622		CEV100M16
	C9625, C9632, C9635, C9642, C9645		CEV100M16
	C9652, C9655		CEV100M16
	C9016		CEV100M35
	C9071, C9091, C9262		CEV101M6R3
	C9415, C9425, C9445, C9455, C9475		CEV220M16
	C9485		CEV220M16
	C9241		CEV221M4
	C9801, C9802		CEV330M25
	C9111, C9242, C9363, C9373, C9383		CEV470M6R3
	C9712		CKCYB102K50
	C9031, C9371		CKSQYB102K50
	C9014, C9054, C9056, C9092, C9101		CKSQYB103K50
	C9103, C9701, C9703, C9706 – C9708		CKSQYB103K50
	C9121, C9153, C9154, C9581		CKSQYB104K25
	C9205, C9225		CKSQYB152K50
	C9483, C9484		CKSQYB223K50
	C9582		CKSQYB273K50
	C9653		CKSQYB393K50
	C9001 – C9006, C9008 – C9013, C9015		CKSQYF104Z25
	C9017, C9018, C9043, C9051, C9052		CKSQYF104Z25
	C9055, C9058, C9073 – C9081, C9106		CKSQYF104Z25
	C9110, C9123, C9127, C9202, C9204		CKSQYF104Z25
	C9222, C9224, C9251, C9253, C9256		CKSQYF104Z25
	C9259, C9303, C9310, C9313, C9316		CKSQYF104Z25
	C9319, C9322, C9324, C9362, C9372		CKSQYF104Z25
	C9382, C9402, C9404, C9407, C9409		CKSQYF104Z25
	C9411, C9421, C9432, C9434, C9437		CKSQYF104Z25
	C9439, C9441, C9451, C9462, C9464		CKSQYF104Z25
	C9467, C9469, C9471, C9481, C9501		CKSQYF104Z25
	C9503, C9601, C9611, C9621, C9631		CKSQYF104Z25
	C9641, C9651		CKSQYF104Z25
	C9041, C9042		CKSQYF105Z16

RESISTORS

Mark	No.	Description	Parts No.
	All Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN9801	11PJUMPER CONNECTOR	52147 – 1110
	CN9661	15PJUMPER CONNECTOR	52147 – 1510
	JA9000	PIN JACK(3P)	AKB7092
		DOLBY DIGITAL PCB	ANP7176
	X9301	CRYSTAL RESONATOR (18.432MHz)	ASS1035
	X9001	CRYSTAL FOR VCXO (18.432MHz)	ASS7009
	CN9301	CONNECTOR(10P)	KPE10
	JA9104	OPTICAL RECEIV MOD.	TORX176

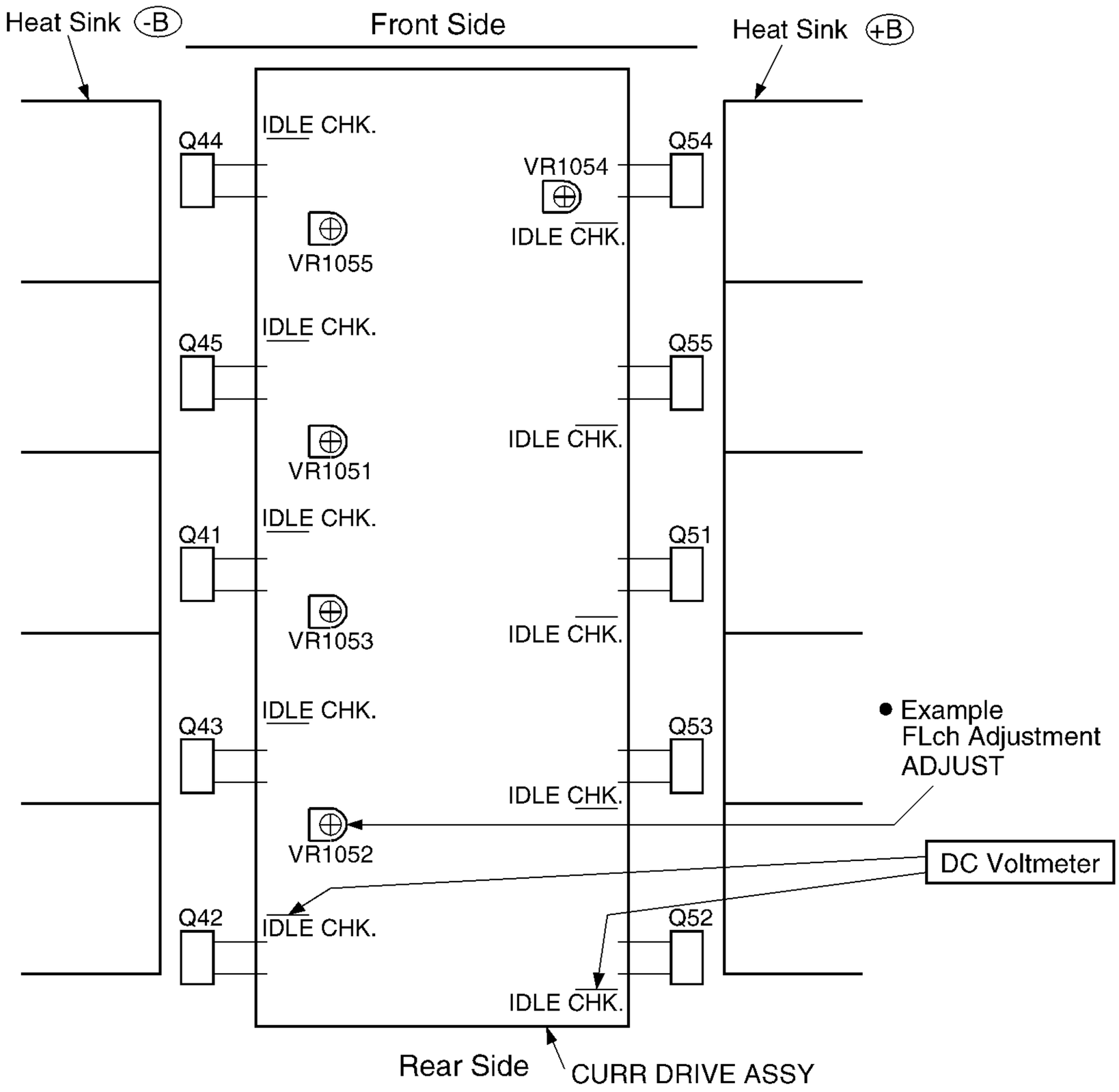
6. ADJUSTMENT

6.1 IDLE CURRENT ADJUSTMENT

- CAUTION : Heatsinks' DC level is equal to +B or -B.
  Don't touch them or you will be electricary shocked.

1. Decrease the level of the Adjustment Variable resistor (VR) for the channel to be adjusted.(Turn counterclockwise.)
2. Set the power switch to ON.
3. While looking at voltage of the adjustment point shown below, gradually turn the Adjustment VR toward the right. Stop at 20mV.
4. Ages for ten minutes.
5. Readjust the voltage to 10 ± 1mV after ten minutes. Adjustment is completed.

ADJUSTMENT ch	ADJUSTMENT VR	ADJUSTMENT POINT
FLch	VR1052	Voltage between IDLE CHK of Q42 and Q52, the terminal with a silk mark.
FRch	VR1053	Voltage between IDLE CHK of Q43 and Q53, the terminal with a silk mark.
Cch	VR1051	Voltage between IDLE CHK of Q41 and Q51, the terminal with a silk mark.
SRch	VR1055	Voltage between IDLE CHK of Q45 and Q55, the terminal with a silk mark.
SLch	VR1054	Voltage between IDLE CHK of Q44 and Q54, the terminal with a silk mark.



7. GENERAL INFORMATION

7.1 PARTS

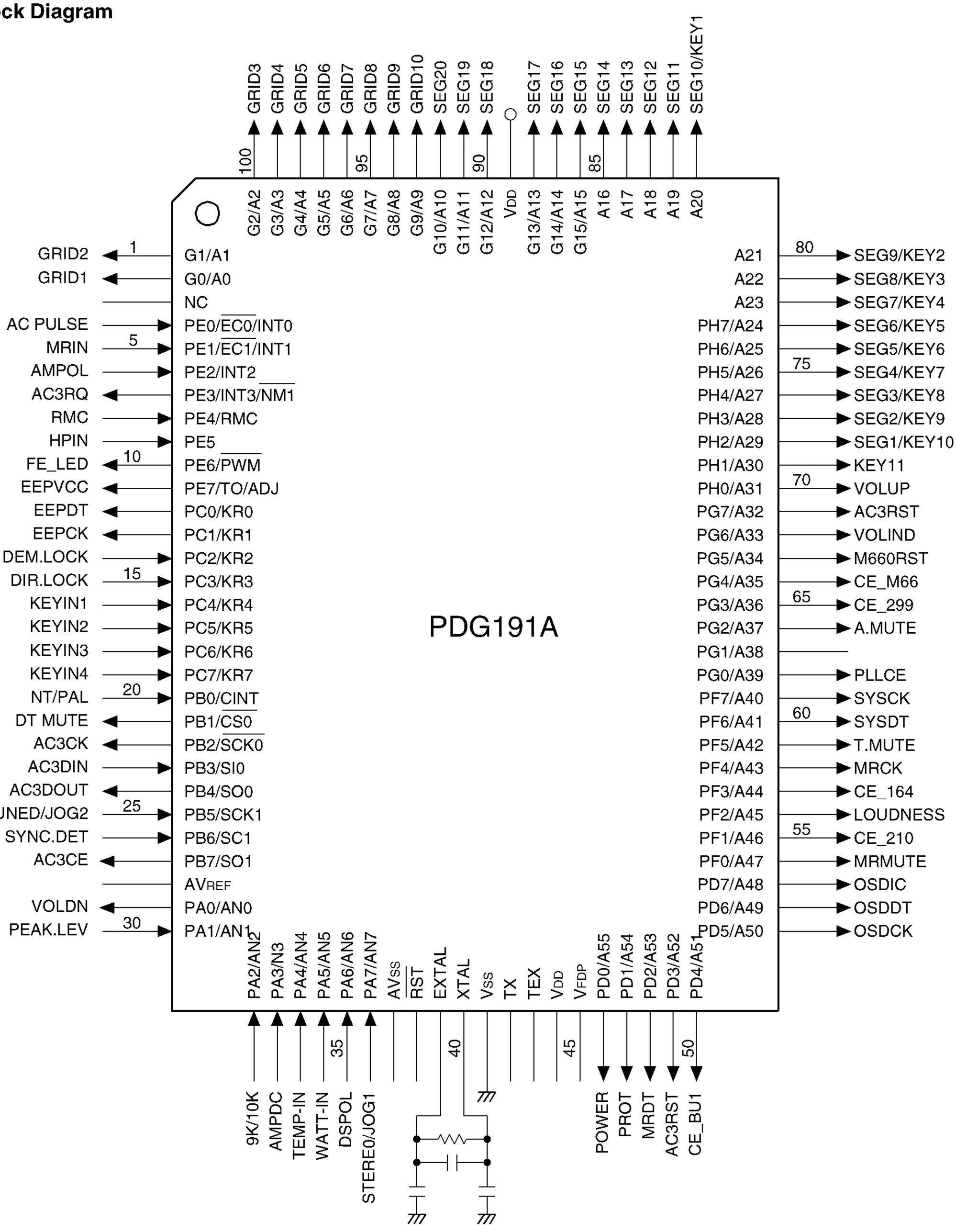
7.1.1 IC

■ PDG191A (FL-UCOM ASSY : IC801)

● RECEIVER CONTROL μ-COM

● Block Diagram

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.



● Pin Function

No.	Name		I/O	Function
1	G11	G1/A1	O	FL grid output 2.
2	G12	G0/A0	O	FL grid output 1.
3	NC	NC	-	5V.
4	WAKEUP	PE0/EC0/INT0	I	AC pulse input.
5	MRIN	PE1/EC1/INT1	I	Sub room remote control input.
6	AMP OVERLOAD	PE2/INT2	I	AMP overload detect A/D input.
7	AC3REQ	PE3/INT3/NMI	I	Requests communications to the microprocessor in the main unit from AC3. (L: Request for communication)
8	RMS	PE4/RMC	I	Remote control input.
9	HPIN	PE5	I	Headphone connect detect. H : connect
10	LFE LED	PE6/PWM	O	LED lights up during playback of AC3 or partial playback of LEF.
11	EEPVCC	PE7/TO/ADJ	O	
12	EEPDT	PC0/KR0	O	Data for communications with EEPROM.
13	EEPCK	PC1/KR1	O	Clock for communications with EEPROM.
14	DEM.LOCK	PC2/KR2	I	Inputs “L” when demodulator IC is locked to RF signal.
15	DIR.LOCK	PC3/KR3	I	Inputs “L” when DIR is locked to digital input signal.
16	KEYIN1	PC4/KR4	I	KEY scan input 1.
17	KEYIN2	PC5/KR5	I	KEY scan input 2.
18	KEYIN3	PC6/KR6	I	KEY scan input 3.
19	KEYIN4	PC7/KR7	I	KEY scan input 4.
20	NT/PAL	PB0/CINT	I	NTSC/PAL switching. (L : PAL)
21	91620N	PB1/CS0	O	Sets to “H” when data are transferred to TC9162 (2).
22	AC3CK	PB2/SCK0	O	Clock for communications of AC3 microcomputer.
23	AC3DIN	PB3/SI0	I	Data in for communications of AC3 microcomputer.
24	AC3DOUT	PB4/SO0	O	Data out for communications of AC3 microcomputer.
25	TUNED/JOG2	PB5/SCK1	I	TUNER : TUNER input. (L : TUNED)/JOG2 : Port data input
26	SYNC.DEC	PB6/SC1	I	Detection of synchronizing signal (L: Signal detected)
27	AC3CE	PB7/SO1	O	Chip selection for communications with AC3 IC module.
28	AVREF	AVREF	-	5V.
29	VOLDOWN	PA0/AN0	O	Master Volume (electrically operated) DOWN output.
30	PEAK.LEV	PA1/AN1	I	
31	9K/10K	PA2/AN2	I	Switching frequency steps of the tuner. (AM L : 9K H : 10K, FM L : 50K H : 100K)
32	AMP DC DETECT	PA3/AN3	I	Detection of AMP power error, A/D input.
33	TEMP-IN	PA4/AN4	I	Fan temperature input, A/D input.
34	WATT-IN	PA5/AN5	I	Fan wattage input, A/D input.
35	DSP OVERLOAD	PA6/AN6	I	DSP overload detect. A/D input.
36	JOG1/STEREO	PA7/AN7	I	JOG1: Port data input/TUNER: Stereo input (L: Receiving broadcasting in stereo).
37	GND	AVSS	-	GND.
38	RST	RST	I	Reset.
39	EXTAL	EXTAL	-	Oscillator 8MHz.
40	XTAL	XTAL	-	Oscillator 8MHz.
41	GND	VSS	-	GND.
42	TX	TX	O	Open.
43	TEX	TEX	I	GND.
44	VDD	VDD	-	5V.
45	VFDP	VFDP	-	-30V.
46	POWER	PD0/A55	O	AC relay ON/OFF.
47	PROT	PD1/A54	O	Protection relay ON/OFF.
48	MRDT	PD2/A53	O	Data for IC. BU4094, TC9210, LM7001 (TUNER) control.
49	AC3STP	PD3/A52	O	Stops crystal oscillation of IC module for AC3 and internal PLL oscillation.
50	CE BUI	PD4/A51	O	Strobe output for extended IC BU4094 (1).

PDG191A

No.	Name		I/O	Function
51	OSD CK	PD5/A50	O	Clock for communications with OSD IC.
52	OSD DT	PD6/A49	O	Data for communications with OSD IC.
53	OSD CE	PD7/A48	O	Chip selection for communications with OSD IC.
54	MRMUTE	PF0/A47	O	Mute for sub room.
55	CE 210	PF1/A46	O	Strobe output for TC9210.
56	LOUDNESS	PF2/A45	O	LOUDNESS ON/OFF, during operation : H
57	CE 164	PF3/A44	O	Strobe output for TC9162 and TC9164.
58	MRCK	PF4/A43	O	Clock for IC. BU4094, TC9210, LM7001 (TUNER) control.
59	T.MUTE	PF5/A42	O	Tuner mute ON/OFF.
60	SYSDT	PF6/A41	O	Data for IC. TC system, M66311 control.
61	SYSCK	PF7/A40	O	Clock for IC. TC system, M66311 control.
62	PLLCE	PG0/A39	O	Chip selection for tuner IC.
63	CE 163	PG1/A38	O	Strobe output for TC9163.
64	AMUTE	PG2/A37	O	Audio mute ON/OFF.
65	CE 299	PG3/A36	O	Strobe output for TC9299.
66	CE M66	PG4/A35	O	Strobe output for M66311.
67	M660RST	PG5/A34	O	IC output enable signal for M66311 (H: Enabled).
68	VOLIND	PG6/A33	O	Volume IND. control.
69	AC3RST	PG7/A32	O	IC module reset output for AC3.
70	VOLUP	PH0/A31	O	Master Volume (electrically operated) UP output.
71	KEY11	PH1/A30	O	KEY scan output 11.
72	SEG1/KEY10	PH2/A29	O	Segment output 1/KEY scan output 10.
73	SEG2/KEY9	PH3/A28	O	Segment output 2/KEY scan output 9.
74	SEG3/KEY8	PH4/A27	O	Segment output 3/KEY scan output 8.
75	SEG4/KEY7	PH5/A26	O	Segment output 4/KEY scan output 7.
76	SEG5/KEY6	PH6/A25	O	Segment output 5/KEY scan output 6.
77	SEG6/KEY5	PH7/A24	O	Segment output 6/KEY scan output 5.
78	SEG7/KEY4	A23	O	Segment output 7/KEY scan output 4.
79	SEG8/KEY3	A22	O	Segment output 8/KEY scan output 3.
80	SEG9/KEY2	A21	O	Segment output 9/KEY scan output 2.
81	SEG10/KEY1	A20	O	Segment output 10/KEY scan output 1.
82	SEG11	A19	O	Segment output 11.
83	SEG12	A18	O	Segment output 12.
84	SEG13	A17	O	Segment output 13.
85	SEG14	A16	O	Segment output 14.
86	SEG15	G15/A15	O	Segment output 15.
87	SEG16	G14/A14	O	Segment output 16.
88	SEG17	G13/A13	O	Segment output 17.
89	VDD	VDD	-	5V
90	SEG18	G12/A12	O	Segment output 18.
91	SEG19	G11/A11	O	Segment output 19.
92	SEG20	G10/A10	O	Segment output 20.
93	G10	G9/A9	O	Timing output 10.
94	G9	G8/A8	O	Timing output 9.
95	G8	G7/A7	O	Timing output 8.
96	G7	G6/A6	O	Timing output 7.
97	G6	G5/A5	O	Timing output 6.
98	G5	G4/A4	O	Timing output 5.
99	G4	G3/A3	O	Timing output 4.
100	G3	G2/A2	O	Timing output 3.

■ M66311FP (FL-UCOM ASSY : IC803)

● LED DRIVER

● Pin Function

No.	Name	Function
1	MR IND.	LED lights up when Multiroom mode is ON. L : LED lights up.
2	LEF IND.	LED lights up if LFE component is detected during decoding of AC3 signal. “L”: LED lights up.
3	Vcc	Power supply +5V.
4	DATA	Data line for communications with microcomputer.
5	OE	Output enable/disable signal, L : Fixed to “L” (output enabled).
6	LATCH	Strobe line for communications with microcomputer.
7	RESET	Reset input. Temporarily sets to “L” when the power switch is set to ON. After that, fixed to “H”.
8	CLOCK	Clock line for communications with microcomputer.
9	GND	GND.
10		Fixed to “H”.
11	HP RY.	Headphone relay. H : relay ON
12	S/C RY.	R/C relay. H : relay ON
13	Speaker B RY.	Speaker B relay. H : relay ON
14	Speaker A RY.	Speaker A relay. H : relay ON
15	FAN	FAN control. H : ON
16	MPX	Tuner (FM) MONO output. H : MONO output
17	Stereo ON/OFF	Stereo ON/OFF H : Stereo ON
18	↑ ↓	LED lights up when Up and Down arrow keys are enabled. L : LED lights up.
19	←→	LED lights up when Right and Left arrow keys are enabled. L : LED lights up.
20	SL/SR	LED lights up if AC3 signal from the rear system L/R is received. L : LED lights up.
21	S	LED lights up if AC3 signal from the rear system (monaural) is received. L : LED lights up.
22	C	LED lights up if AC3 signal from the center system is received. L : LED lights up.
23	L/R	LED lights up if AC3 signal from the front system L/R is received. L : LED lights up.
24	ADDIR	Switching MS Port. H : Analog input, L : Other than analog input

* Output is port output of M66311 (Set data to “L” when port output is to be set to “H”.)

■ M66311FP (FL-UCOM ASSY : IC804)

● LED DRIVER

● Pin Function

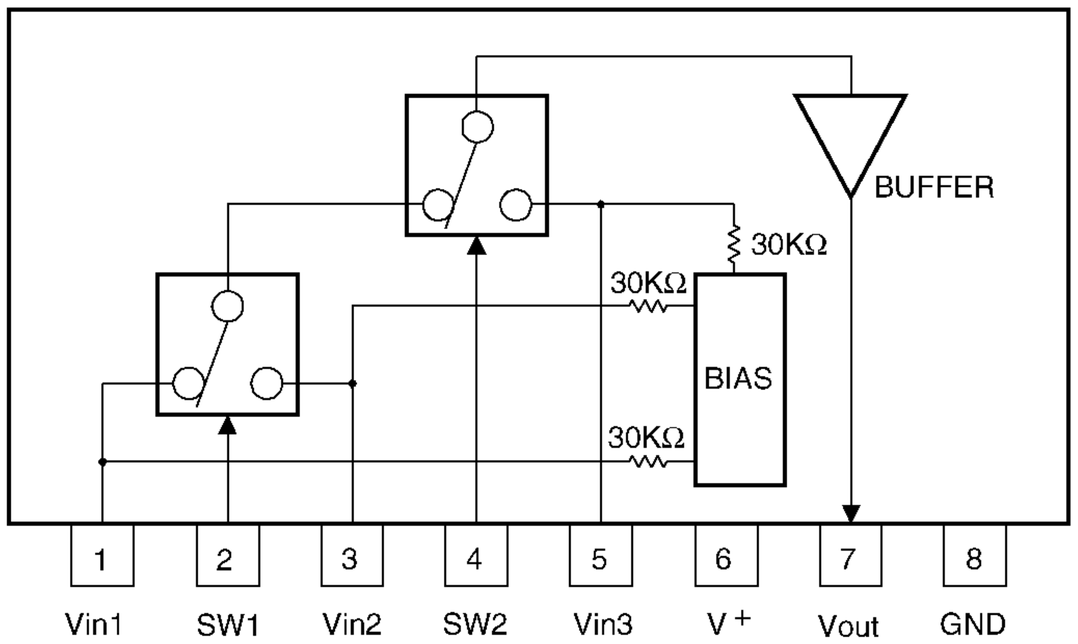
No.	Name	Function
1		Not used. Open
2		Not used. Open
3	Vcc	Power supply +5V.
4	DATA	Data line for communications with microcomputer.
5	OE	Output enable/disable signal, L : Fixed to “L” (output enabled).
6	LATCH	Strobe line for communications with microcomputer.
7	RESET	Reset input. Temporarily sets to “L” when the power switch is set to ON. After that, fixed to “H”.
8	CLOCK	Clock line for communications with microcomputer.
9	GND	GND
10		Fixed to “H”.
11		Not used. Open
12		Not used. Open
13		Not used. Open
14		Not used. Open
15		Not used. Open
16	VCR1 IND.	LED lights up when function is VCR1. L : LED lights up.
17	VCR2 IND.	LED lights up when function is VCR2. L : LED lights up.
18	VIDEO IND.	LED lights up when function is VIDEO. L : LED lights up.
19	DVD IND.	LED lights up when function is DVD. L : LED lights up.
20	LD IND.	LED lights up when function is LD. L : LED lights up.
21	CD IND.	LED lights up when function is CD. L : LED lights up.
22	TUNER IND.	LED lights up when function is TUNER. L : LED lights up.
23	PHONO IND.	LED lights up when function is PHONO. L : LED lights up.
24	TAPE1 IND.	LED lights up when function is TAPE1. L : LED lights up.

* Output is from M66311.

■ NJM2534L (VIDEO ASSY : IC402, S-VIDEO ASSY : IC501, IC502)

● 3 Input Single Video Switch

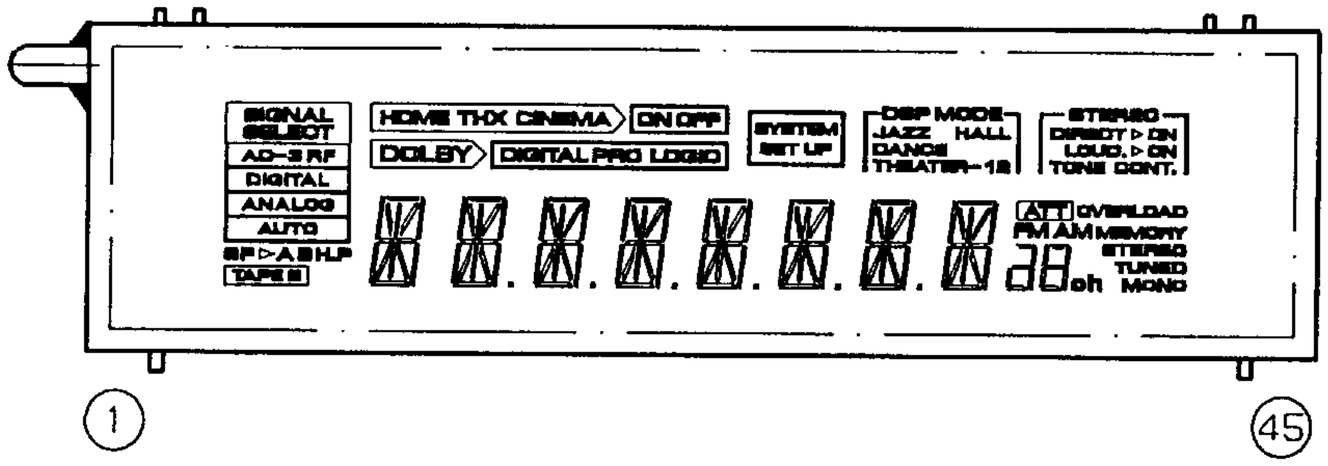
● Block Diagram



7.1.2 DISPLAY

■ AAV7037 (FL-UCOM ASSY:V801)

● FL Tube

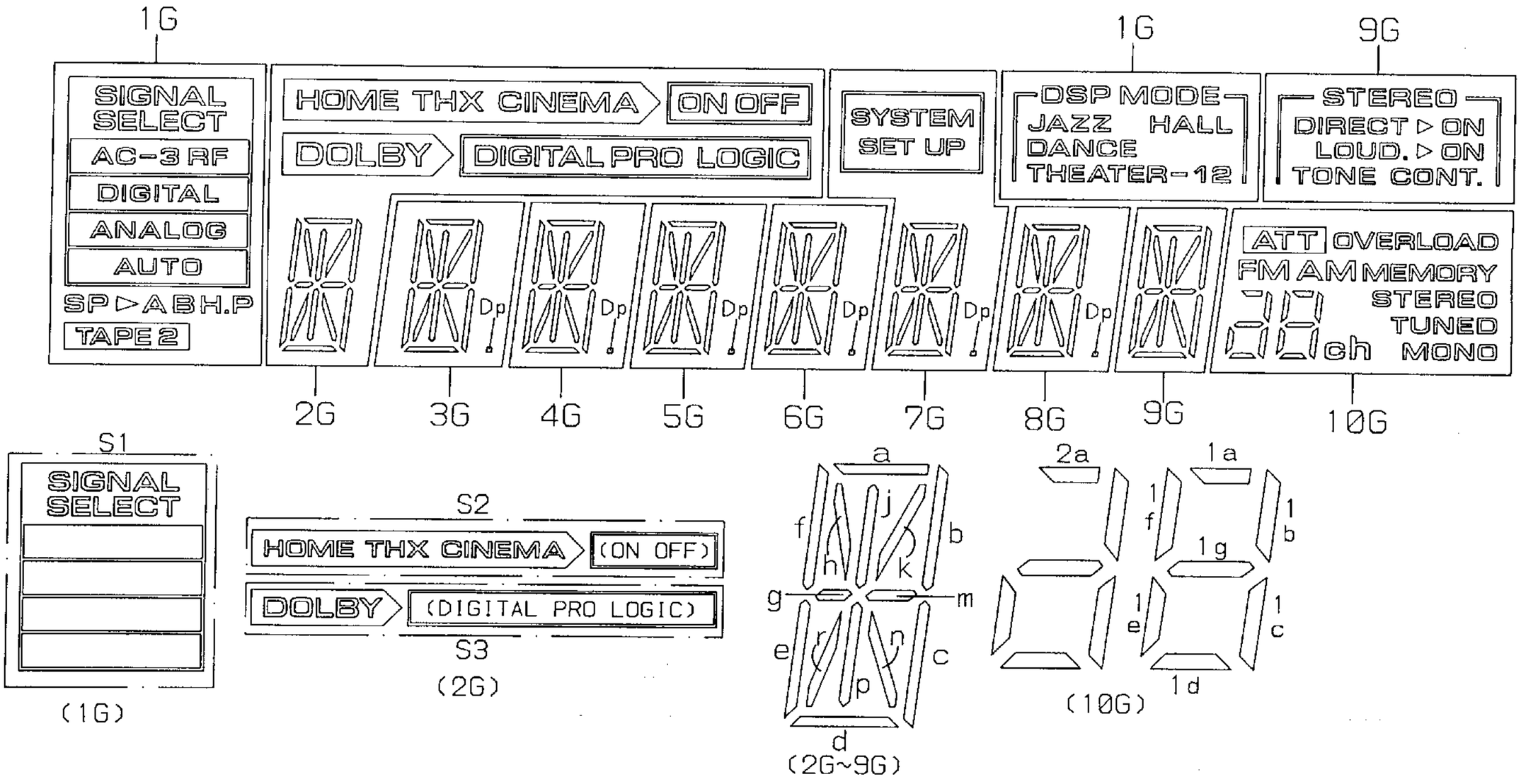


● Pin Assignment

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
CONNECTION	F1	F1	NP	NP	NX	NX	NX	NX	NX	NX	NX	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31	P32	P33	P34	P35	P36	P37	P38	P39	P40	P41	P42	F2	F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) NX ------ No extend pin
4) DL ------ Datum Line
5) 1G~10G --- Grid

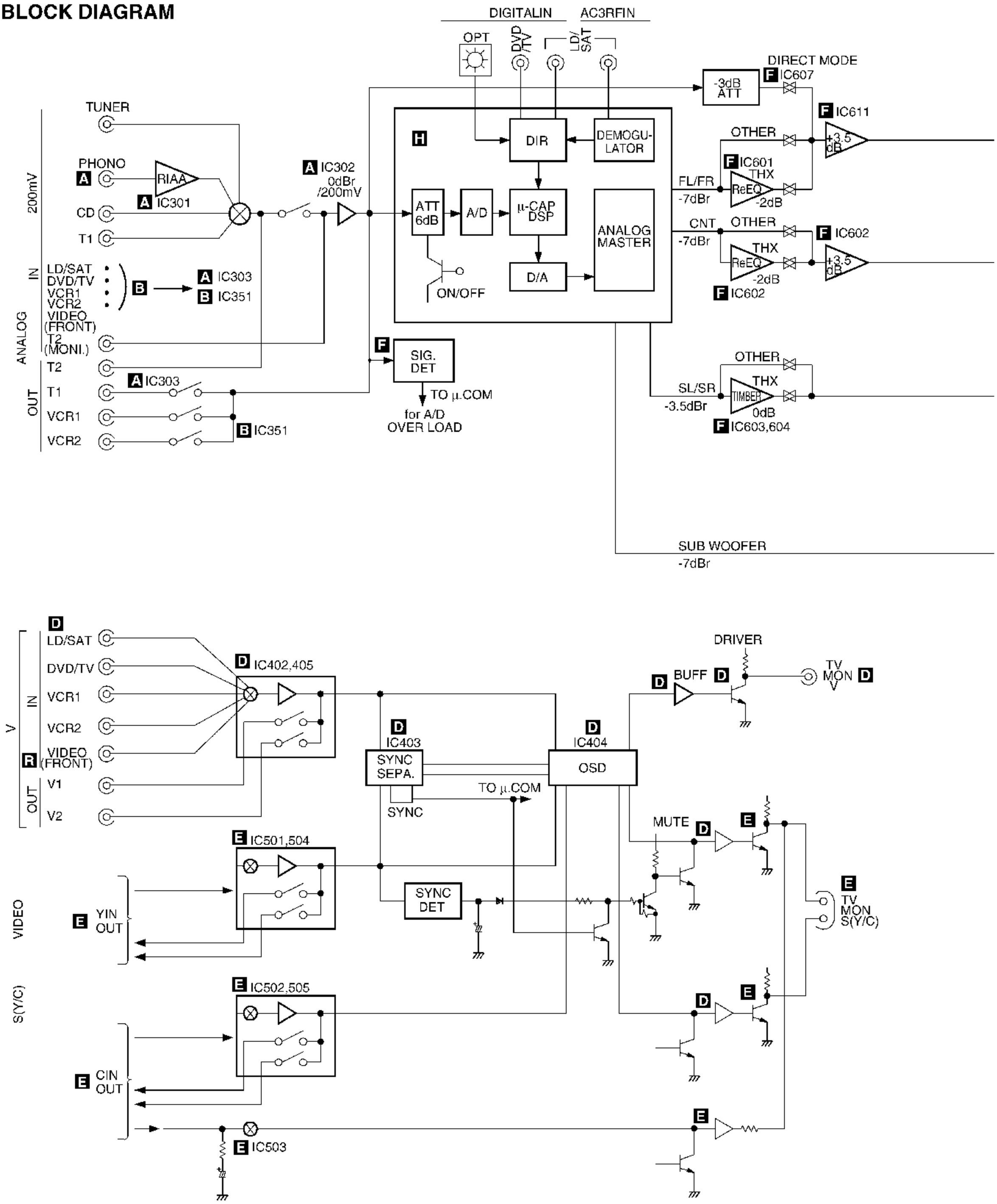
● Grid Assignment

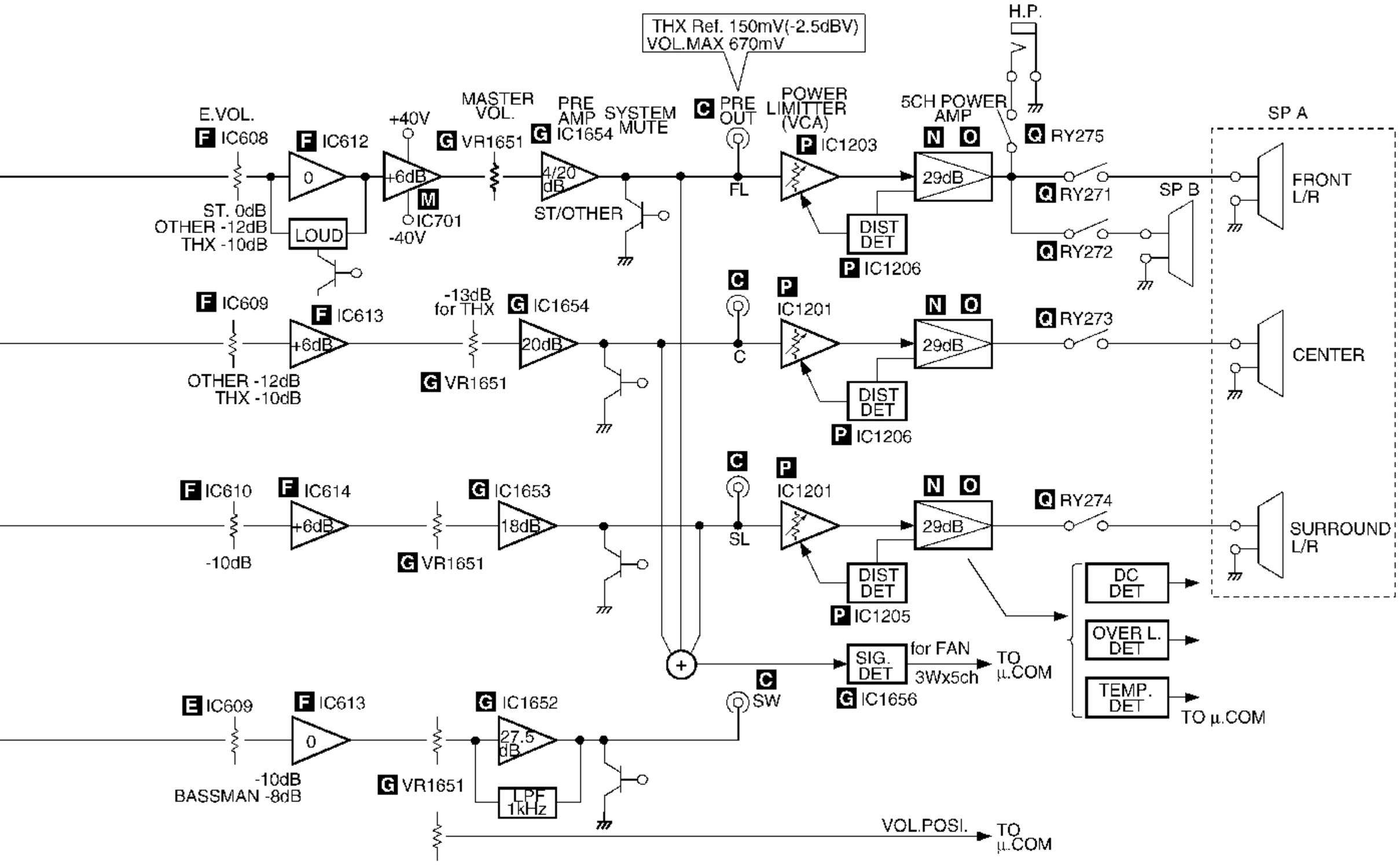


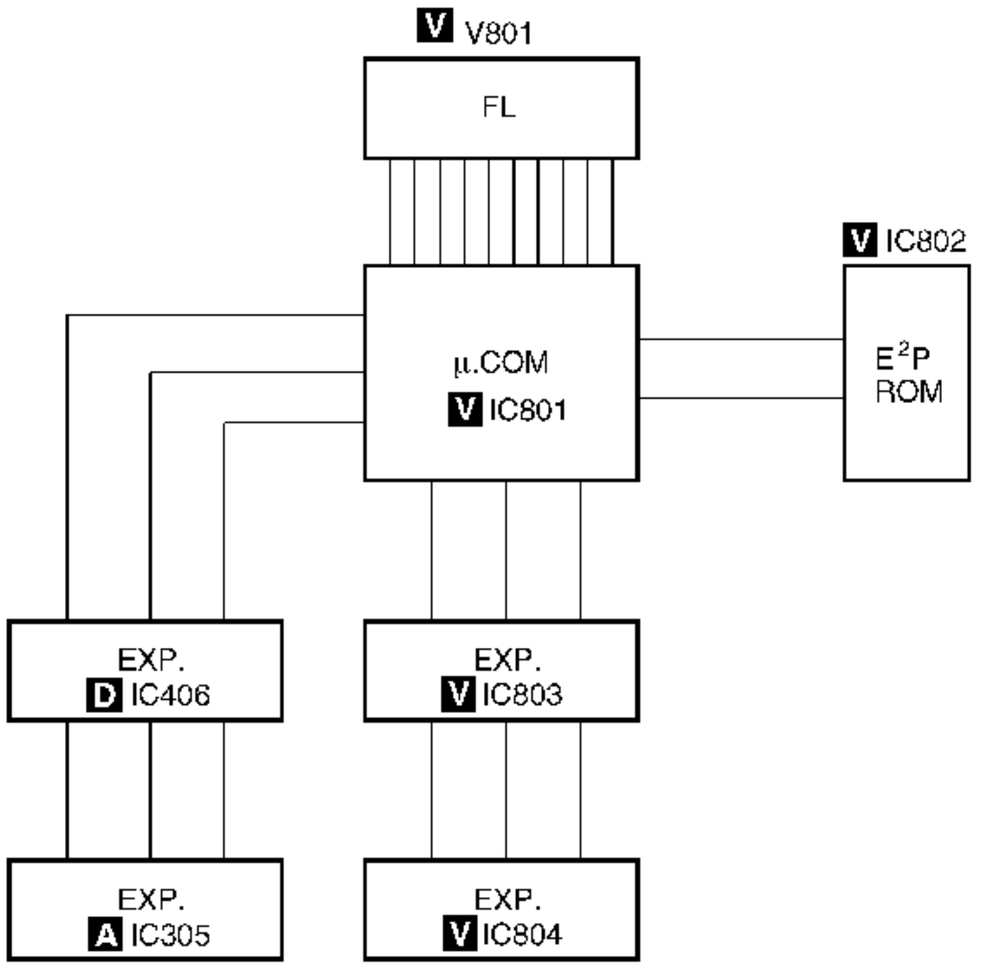
● Anode Connection

	1G	2G	3G~6G	7G	8G	9G	10G
P1	TAPE 2	a	a	a	a	a	1a
P2	SP ▷	j	j	j	j	j	1b
P3	A	k	k	k	k	k	1f
P4	B	h	h	h	h	h	1g
P5	H.P	b	b	b	b	b	1c
P6	AUTO	f	f	f	f	f	1e
P7	ANALOG	g	g	g	g	g	1d
P8	DIGITAL	m	m	m	m	m	2a,2d,2g
P9	AC-3 RF	c	c	c	c	c	2b
P10	S1	e	e	e	e	e	2c
P11	DSP MODE	n	n	n	n	n	2e
P12	JAZZ	r	r	r	r	r	MONO
P13	HALL	p	p	p	p	p	TUNED
P14	DANCE	d	d	d	d	d	STEREO
P15	THEATER-	S2	Dp	Dp	Dp	STEREO	MEMORY
P16	1	ON	–	SYSTEM SET UP	–	DIRECT ▷	AM
P17	2	OFF	–	–	–	ON (上)	FM
P18	–	S3	–	–	–	LOUD. ▷	ch
P19	–	PRO LOGIC	–	–	–	ON (下)	ATT
P20	–	DIGITAL	–	–	–	TONE CONT.	OVERLOAD

7.2 BLOCK DIAGRAM



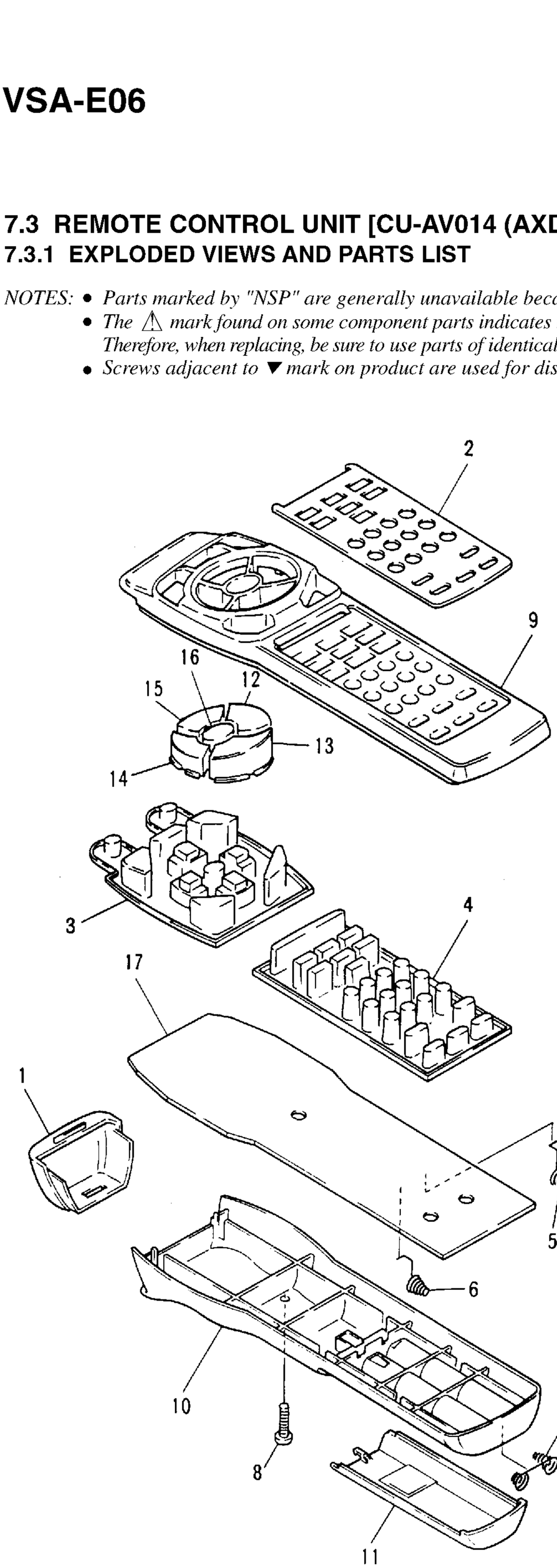

THX Ref. 150mV(-2.5dBV)
VOL.MAX 670mV
H.P.
E.VOL.
F IC608
ST. 0dB
OTHER -12dB
THX -10dB
F IC612
0
LOUD
+40V
+6dB
M
IC701
-40V
MASTER VOL.
G VR1651
PRE AMP
G IC1654
SYSTEM MUTE
4/20 dB
ST/OTHER
C PRE OUT
FL
POWER LIMITTER (VCA)
P IC1203
DIST DET
P IC1206
5CH POWER AMP
N O
29dB
Q RY275
Q RY271
Q RY272
SP A
SP B
FRONT L/R
F IC609
OTHER -12dB
THX -10dB
F IC613
+6dB
-13dB for THX
G VR1651
G IC1654
20dB
C
P IC1201
N O
29dB
Q RY273
CENTER
DIST DET
P IC1206
F IC610
-10dB
F IC614
+6dB
G VR1651
G IC1653
18dB
SL
P IC1201
N O
29dB
Q RY274
SURROUND L/R
DIST DET
P IC1205
DC DET
OVER L. DET
TEMP. DET
TO µ.COM
SIG. DET
for FAN
3Wx5ch
TO µ.COM
G IC1656
C
SW
E IC609
-10dB
BASSMAN -8dB
F IC613
0
G VR1651
G IC1652
27.5 dB
LPF 1kHz
VOL.POSI.
TO µ.COM


V V801
FL
V IC802
µ.COM
V IC801
E²P ROM
EXP.
D IC406
EXP.
V IC803
EXP.
A IC305
EXP.
V IC804

7.3 REMOTE CONTROL UNIT [CU-AV014 (AXD7149)]

7.3.1 EXPLODED VIEWS AND PARTS LIST

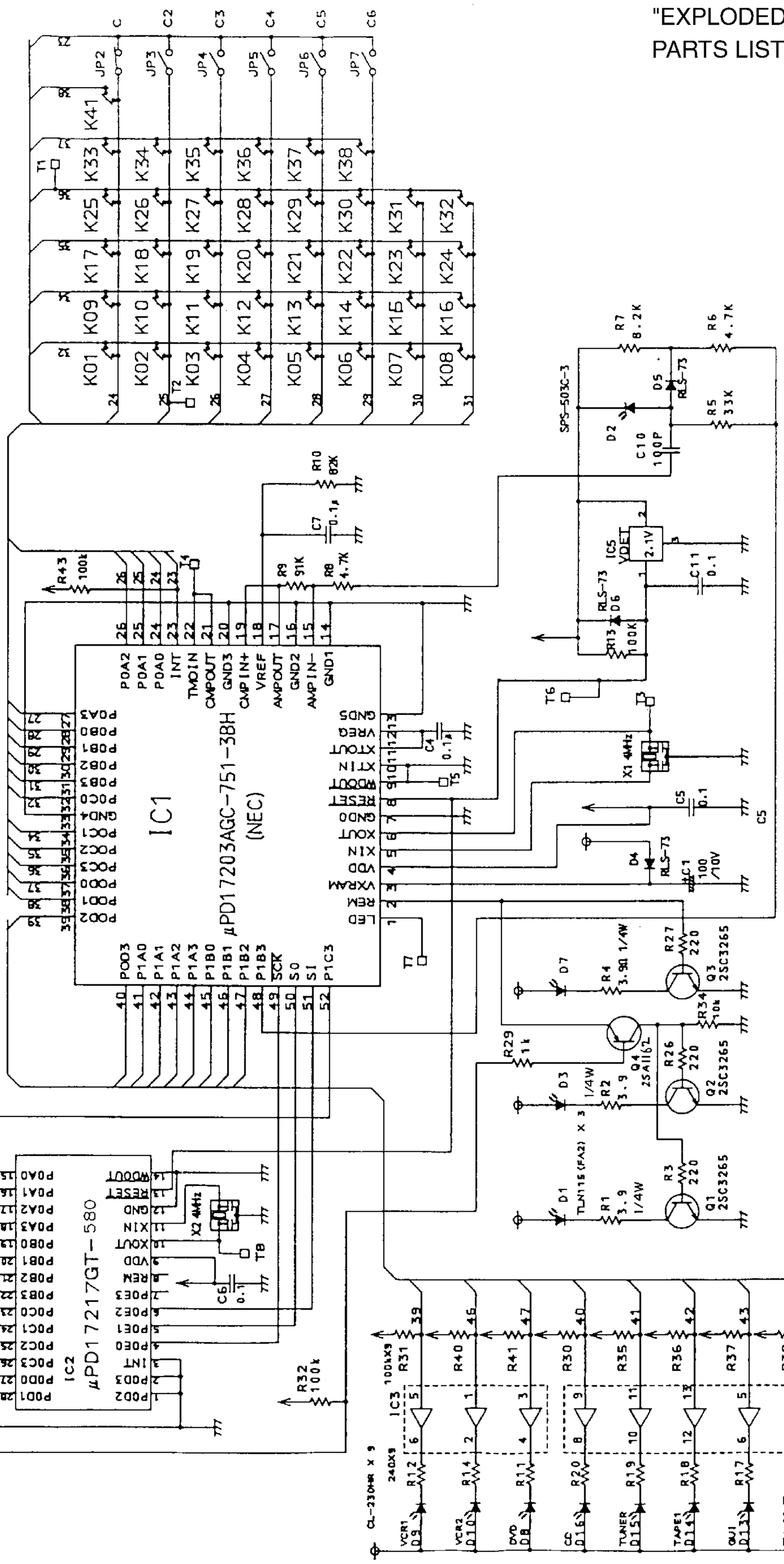
NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*



■ **Parts List**

Mark	No.	Description	Parts No.
	1	Filter	AZA7152
	2	Name Plate	AZA7266
	3	Rubber Sheet (A)	AZA7267
	4	Rubber Sheet (B)	AZA7268
	5	Spring (+)	AZB7049
	6	Spring (–)	AZB7050
	7	Spring	AZB7051
	8	Screw	AZB7052
	9	Remo-con Case (A)	AZN7690
	10	Remo-con Case (B)	AZN7691
	11	Battery Cover	AZN7692
	12	Main Key (FF)	AZN7693
	13	Main Key (STOP)	AZN7694
	14	Main Key (REV)	AZN7695
	15	Main Key (PAUSE)	AZN7696
	16	Main Key (PLAY)	AZN7697
NSP	17	PCB	AZW7243

7.3.2 SCHEMATIC AND PCB DIAGRAM

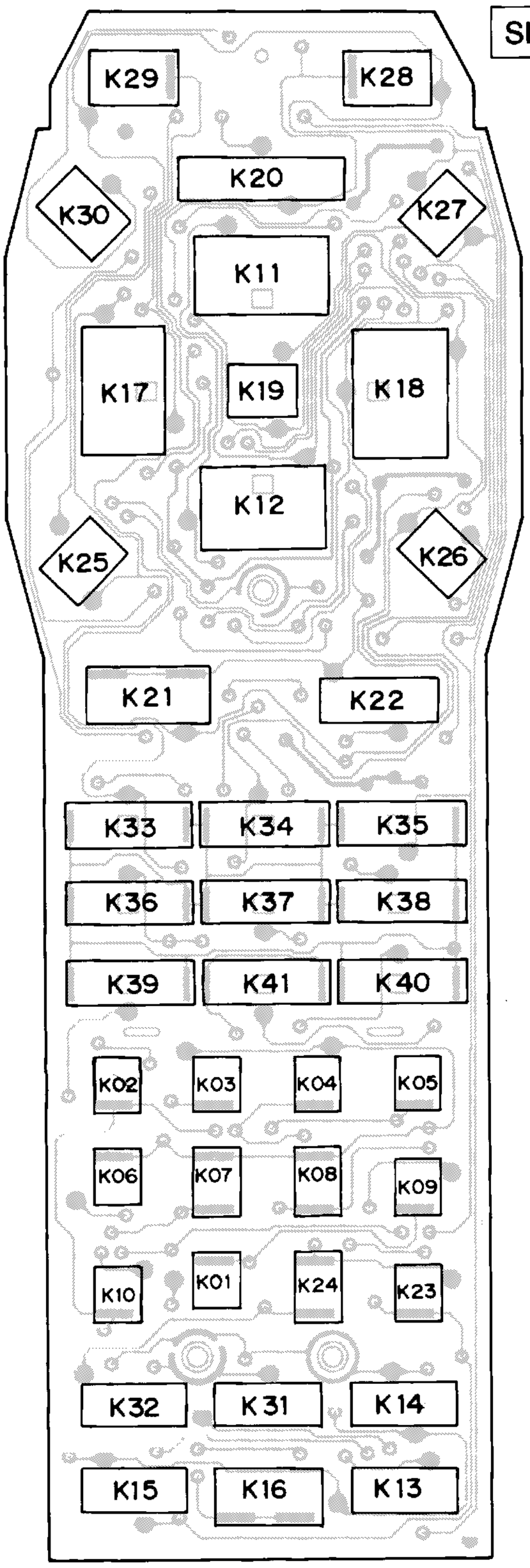


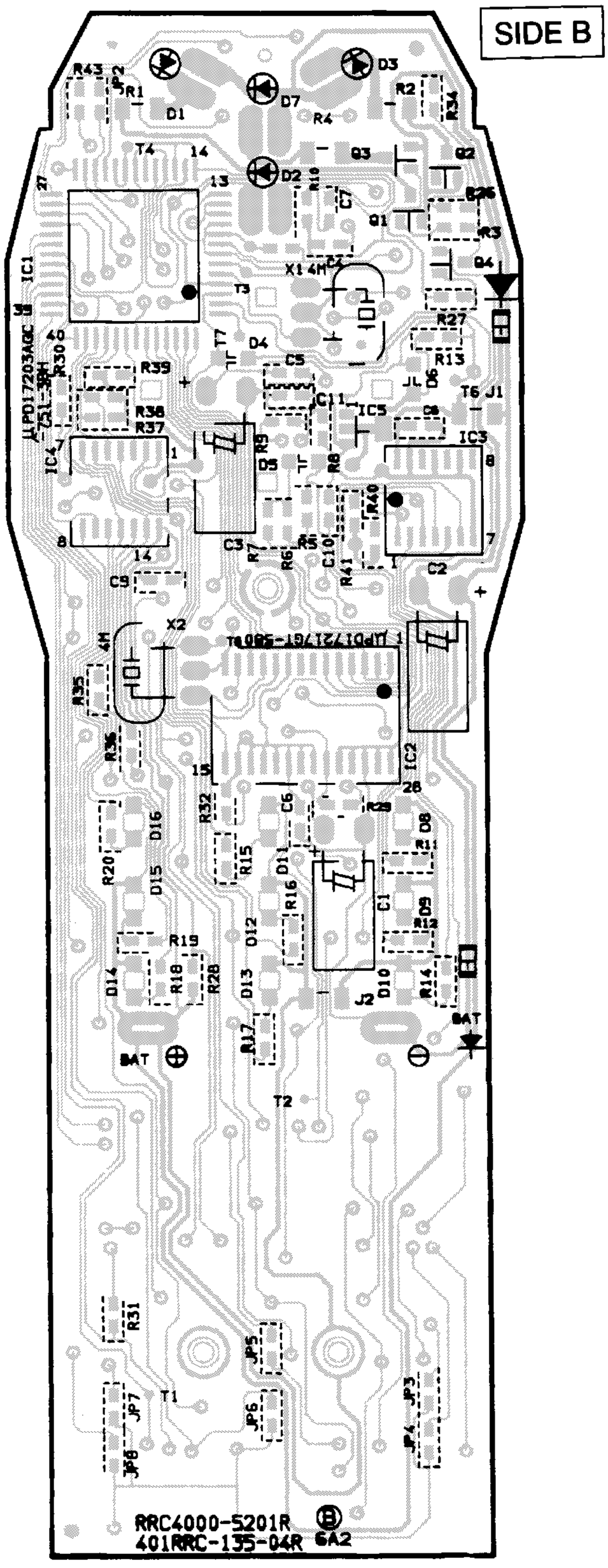
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

■ SWITCHES

K01 : 10 (0)
K02 : 1
K03 : 2
K04 : 3
K05 : 4
K06 : 5
K07 : 6
K08 : 7
K09 : 8
K10 : 9
K11 : ▲II
K12 : ▼■
K13 : SET UP
K14 : MODE CHK
K15 : MULTI OPE.
K16 : SYS. OFF
K17 : ◀◀
K18 : ▶▶
K19 : ▶ ENT.
K20 : POWER
K21 : I◀◀ CH-
K22 : ▶▶I CH+
K23 : 12 (DISC)
K24 : 11 (+10)
K25 : VOL.-
K26 : VOL.+
K27 : TV FUNC.
K28 : TV POWER
K29 : AMP POW.
K30 : MUTING
K31 : LIST
K32 : FUNCTION
K33 : DVD
K34 : LD/SAT
K35 : CD
K36 : VCR1
K37 : TV CONT.
K38 : TUNER
K41 : SURROUND

VSA-E06


SIDE A
K29
K28
K20
K30
K27
K11
K17
K19
K18
K12
K25
K26
K21
K22
K33
K34
K35
K36
K37
K38
K39
K41
K40
K02
K03
K04
K05
K06
K07
K08
K09
K10
K01
K24
K23
K32
K31
K14
K15
K16
K13


SIDE B
RRC4000-5201R
401RRC-135-04R
6A2

7.3.3 PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	→	*56 × 10¹*	→	*561*	*RD1/4PU 5 6 1 J*
47kΩ	→	*47 × 10³*	→	*473*	*RD1/4PU 4 7 3 J*
0.5Ω	→	*R50*			*RN2H R 5 0 K*
1Ω	→	*1R0*			*RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	→	*562 × 10¹*	→	*5621*	*RN1/4PC 5 6 2 1 F*

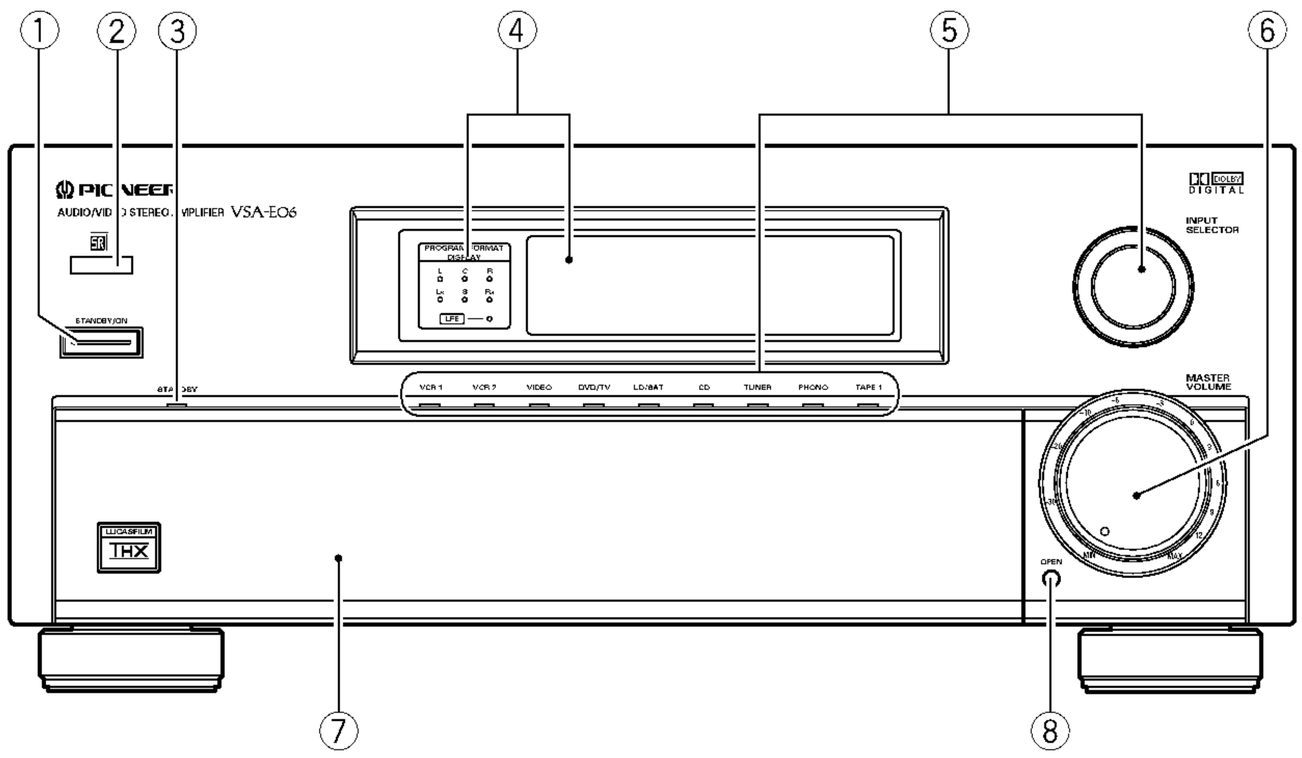
Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1		AZC7275
	IC2		AZC7274
	IC3, IC4		TC74HC07AF
	IC5		RH5VA21AA
	Q4 – Q6		2SA1037
	Q1 – Q3		2SC3265
	D1, D3, D7		SE1003 – C
	D2		SPS – 503C – 3
	D8 – D20	LED	CL – 230HR – CD
	D4 – D6		RLS – 73
CAPACITORS			
	C2		CEAS470M10
	C4 – C7, C11		CKSQYB104K25
	C3		CEAS221M10
	C1		CEAS101M6R3
	C8 – C10		CCSQCH100J50
RESISTORS			
	R2001, R2002		RS1/8S0R0J
	R1, R2 ,R4		RS1/8S3R9J
		Other Resistors	RS1/10S□□□J
OTHERS			
	X1, X2	RESONATOR (4MHz)	KBR – 4.0M

8. PANEL FACILITIES AND SPECIFICATIONS

NAMES OF PARTS

* The size of characters shown in the figure may differ from that on the actual product.

Front panel



① STANDBY/ON switch

This is the switch for electric power. Before operating the unit, set the MAIN POWER switch inside the ⑦ door panel to the ON position. If it is OFF, this STANDBY/ON switch does not function.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

[Timer ON/OFF is possible]

When the unit is switched ON, ON/OFF control can be performed by means of an optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② Remote sensor

③ STANDBY indicator

The STANDBY indicator lights when the power is set to STANDBY, and goes out when set to ON.

④ Displays

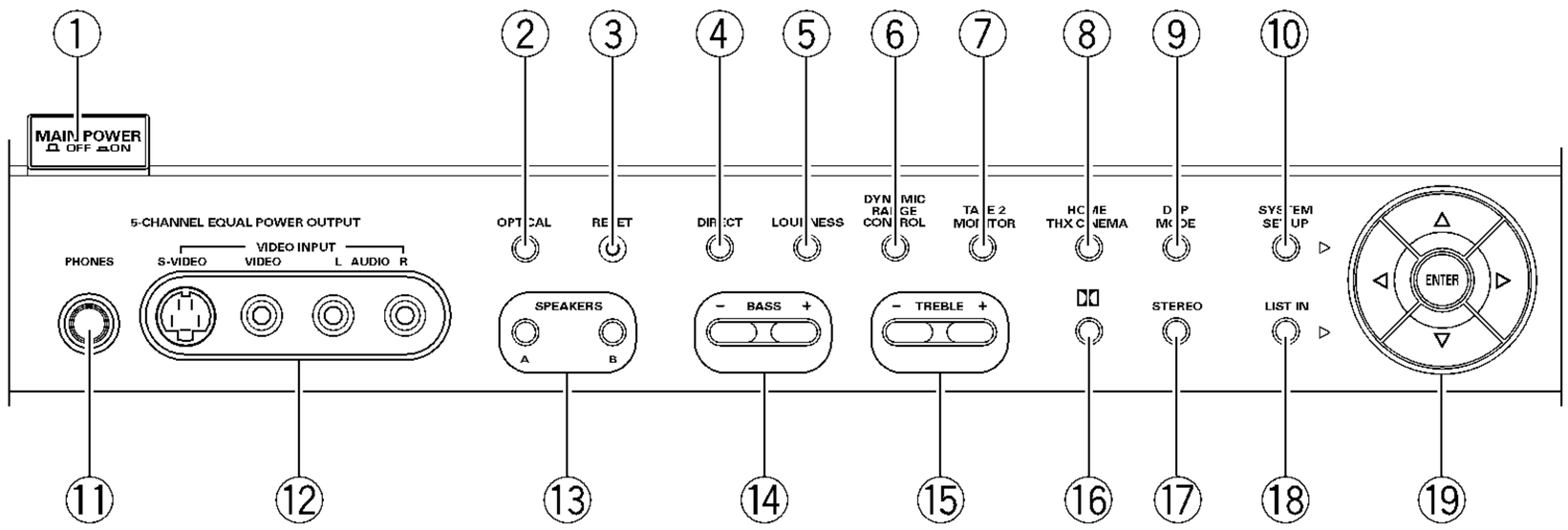
⑤ INPUT SELECTOR knob and indicators

⑥ MASTER VOLUME knob

⑦ Door panel

⑧ Door panel OPEN button

Inside the door panel



① MAIN POWER switch

This is the switch for electric power.
After completing the connection of the power cord, set the switch to ON.

② OPTICAL button

③ RESET button

④ DIRECT button[*NOTE]

Use to playback sound without going through the tone control circuits. This button operates in stereo mode only.

⑤ **LOUDNESS button**[*NOTE]
Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily. This button operates in stereo mode only.

⑥ **DYNAMIC RANGE CONTROL button**
This equalizes the sound to let you hear subtle sounds even when listening at low volume levels. You can only use this function during DOLBY DIGITAL operation.

⑦ **TAPE 2 MONITOR button**

⑧ **HOME THX CINEMA button**

⑨ **DSP MODE button**[*NOTE]

⑩ **SYSTEM SET UP button**

⑪ **PHONES jack (Headphone terminal)**
During Dolby Digital operation, remember that LFE channel sound from the sub woofer is still output even if you connect the headphone plug.

⑫ **Video input terminals**
Connect to a video camera, etc.

⑬ **SPEAKERS A, B buttons**
ON/OFF switches for the A and B speaker systems.

⑭ **BASS (–, +) buttons**[*NOTE]
Use to adjust tone. These buttons operate in stereo mode only.

⑮ **TREBLE (–, +) buttons**[*NOTE]
Use to adjust tone. These buttons operate in stereo mode only.

⑯ **DD button**

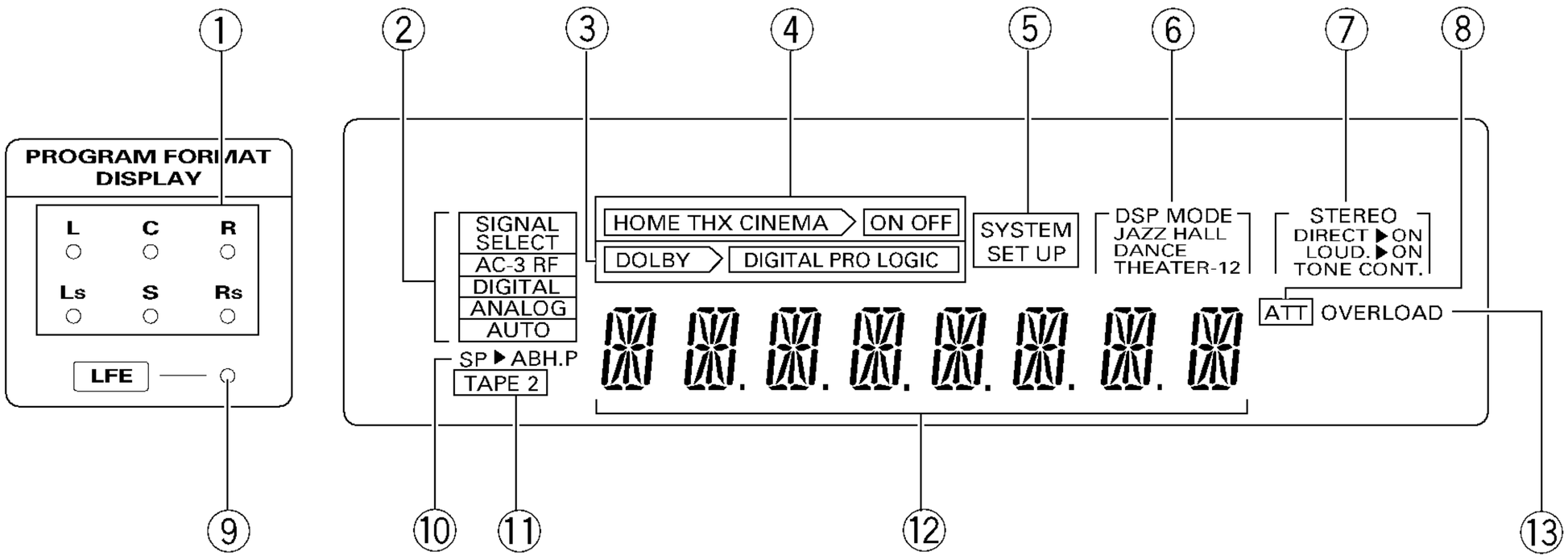
⑰ **STEREO button**

⑱ **LIST IN button**

⑲ **Select/Adjust buttons**

***NOTE:**
These operation buttons do not function during AC-3 input.

Display



① **PROGRAM FORMAT display**
When playing back in the Dolby Digital (AC-3) mode, the indicator of the channels set for the playback source lights.

② **SIGNAL SELECT indicators**
The input signal format currently selected will light.

③ **DOLBY DIGITAL and PRO LOGIC indicators**
"DOLBY" lights when the Dolby Surround mode is ON. There are two Dolby Surround modes - Dolby Digital (AC-3) and Dolby Pro Logic. "DOLBY" and "DIGITAL" light during Dolby Digital, and "DOLBY" and "PRO LOGIC" light when played back in Dolby Pro Logic.

④ **HOME THX CINEMA mode indicators**
Light when HOME THX CINEMA mode is selected.

⑤ **SYSTEM SET UP indicator**
Lights when SYSTEM SET UP mode is selected.

⑥ **DSP MODE indicators**
Light when DSP MODE is selected.

⑦ **STEREO indicators**
Light when STEREO mode is selected.

⑧ **ATT indicator**
Lights when INPUT ATT is ON.

⑨ **LFE indicator**
LFE lights when the LFE (Low Frequency Effects) channel is set for the playback source with Dolby Digital. The LFE indicator also lights when LFE signals are input.

⑩ **Speakers A, B, H.P indicators**
The indicator of the speaker system (A, B) selected will light.
"H.P" lights when using a headphone.
When you use headphones, both SPEAKERS A and B will switch OFF.

⑪ **TAPE 2 indicator**
Lights when TAPE 2 MONITOR is ON.

⑫ **CHARACTER display**

⑬ **OVERLOAD indicator**
This lights when analog signal input level is excessive.
When it flashes, switch ATT ON using the remote control to reduce the strength of the input signal.

CONNECTING PRODUCTS

* The size of characters and terminal positions in the figures may differ from those on the actual product.

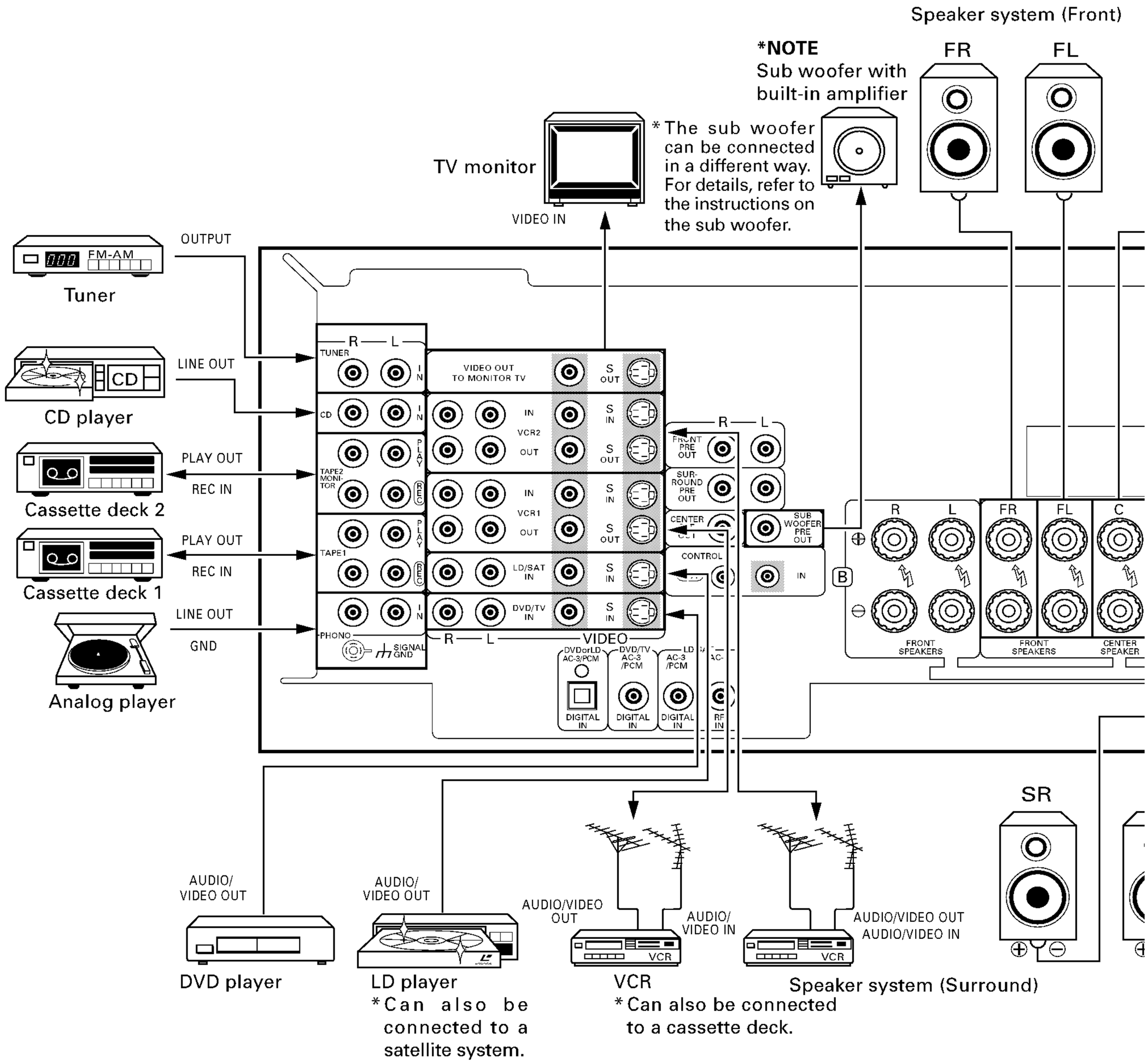
*** NOTE:**
If you set the PLAYBACK MODE to STEREO, and set the FRONT channel to "Large" during SPEAKER SETTING, no signal is output from the SUB WOOFER PRE OUT terminal.
However, during AC-3 input, a signal is output when the LFE indicator is lit.

When connecting or changing products, be sure to turn OFF the POWER switch, and disconnect the power cord from the wall outlet.

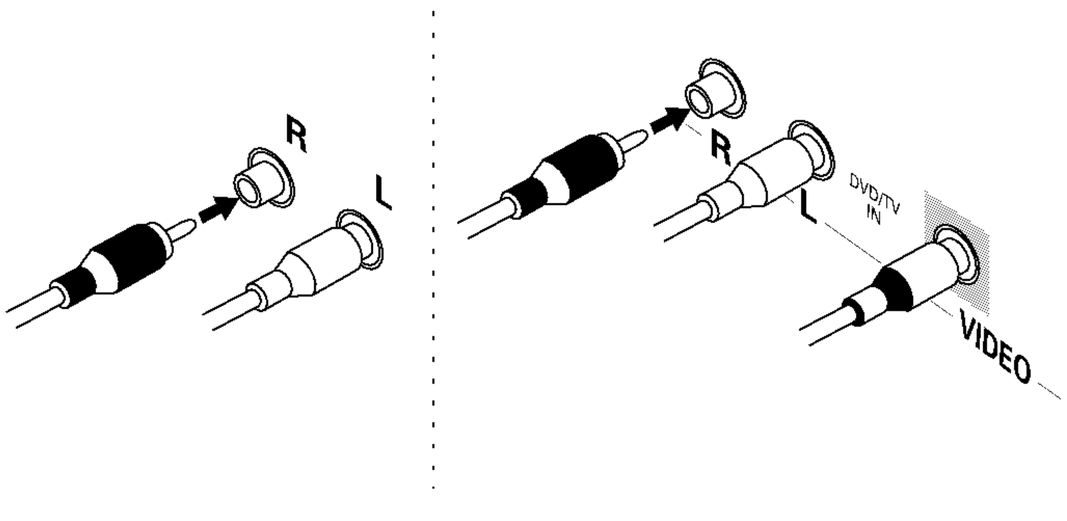
POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

Illustration shows U.K. model.



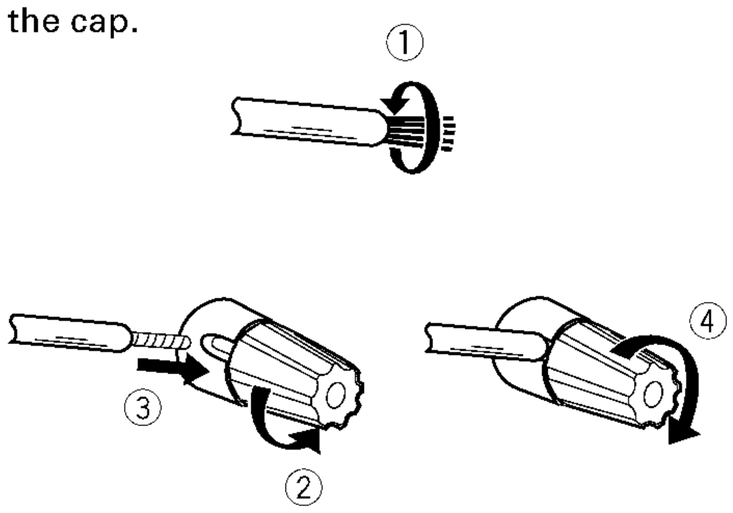
■ Input/output plugs



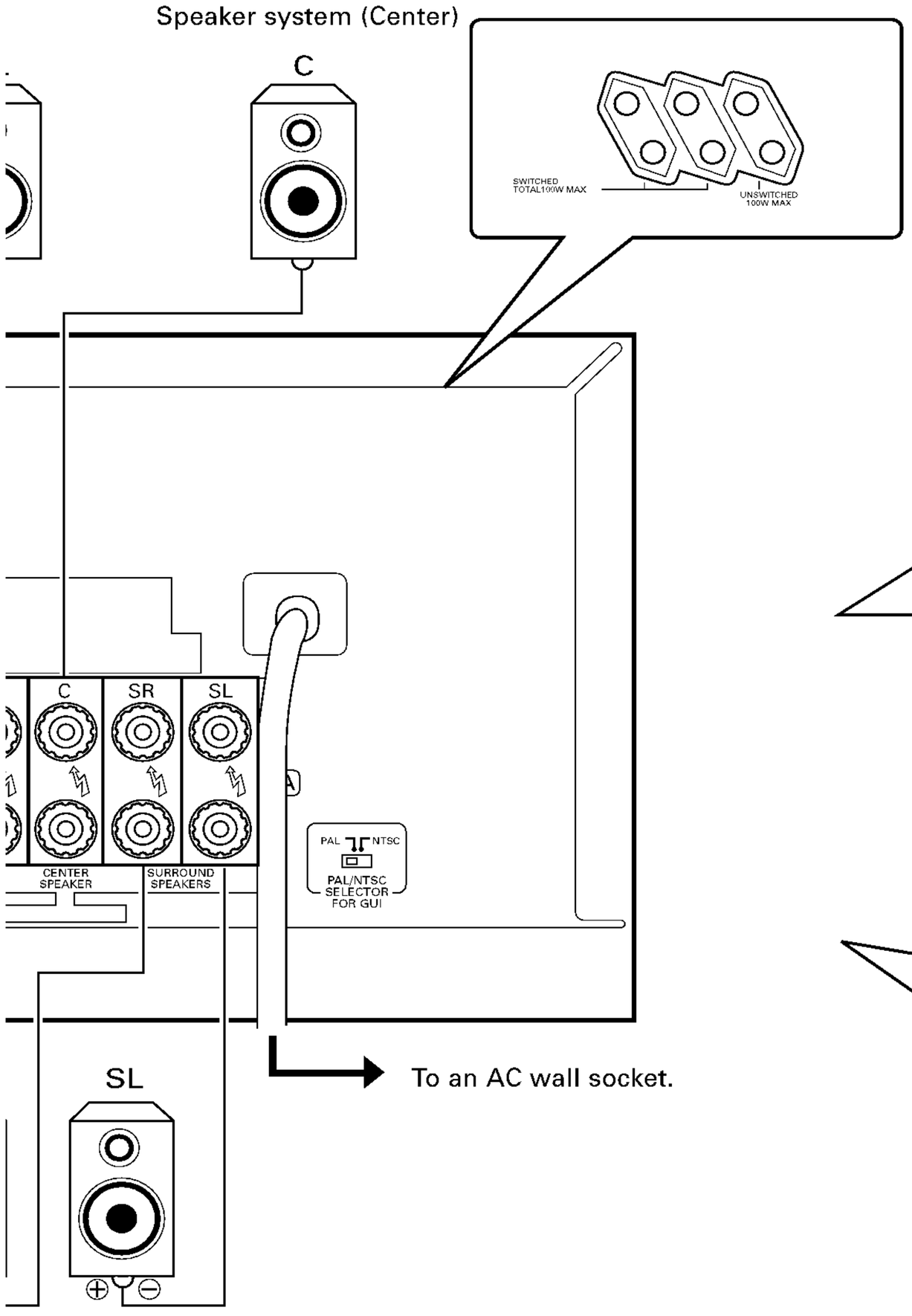
Connect the white plug to L, red plug to R and yellow plug to VIDEO. Be sure to insert completely.

■ Speaker terminal

① Twist the wire tip.
② Loosen the cap.
③ Insert the wire.
④ Tighten the cap.

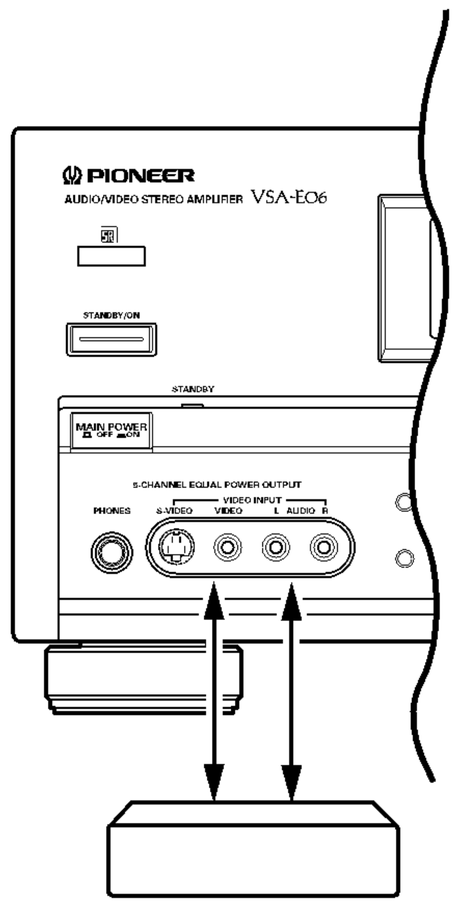


Speaker system (Center)



To an AC wall socket.

■ Front Panel



Video products such as a video camera, etc.
Set the INPUT SELECTOR to VIDEO before using.

■ PAL/NTSC switch

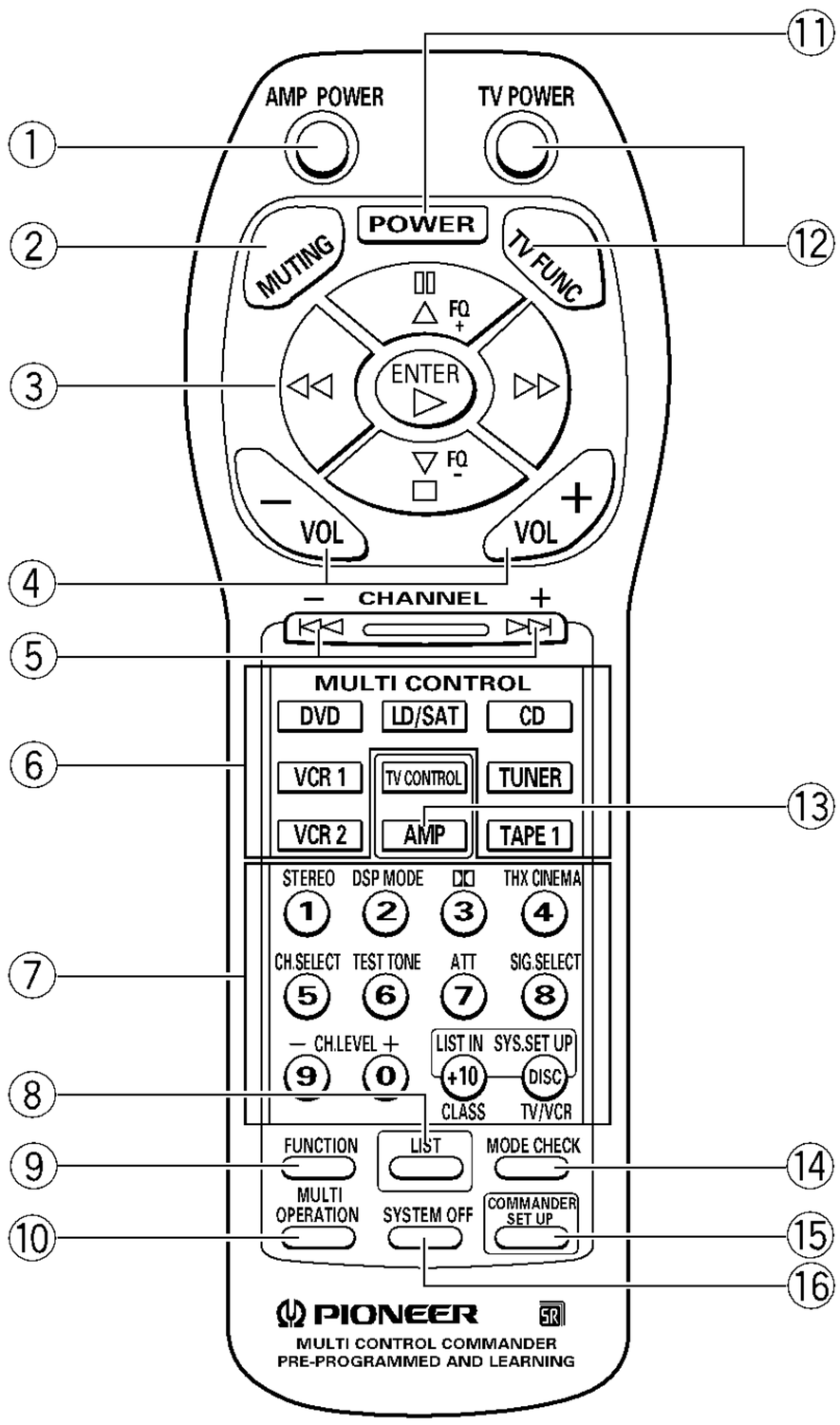
This unit uses the TV screen to operate the system. Set the PAL/NTSC switch to match your TV's color system. The screen will be unclear if the color system does not match.

memo

- Use nominal impedance of 6 Ω to 16 Ω for the speaker system.
- Sound is output from speakers connected to FR, FL, C, SR, or SL terminals if the SPEAKERS A button on the front panel is set to ON.
  If you want sound from speakers connected to the R and L terminals, set the SPEAKERS B button to ON.

VSA-E06

Remote control unit



① AMP (Amplifier) POWER button

② MUTING button
Press to mute the volume.

③ [When set to AMP (OPERATIONS)]
△, ▽, ◁, ▷, ENTER (Select/Adjust) buttons.

[When set to other than AMP (OPERATIONS)]
⏸ (Pause), □ (Stop), ◁◁ (Rewind), ▷▷ (Fast Forward), ▷ (Play) buttons.
⏸, □ operate as FQ + (Frequency up) and FQ – (Frequency down) buttons in TUNER function.

④ VOL (–, +) buttons

⑤ [TV, VCR Operations]
Selects the TV broadcast channel.

[CD, LD, DVD operations]
⏮, ⏭ (Chapter/Track Search) buttons.

[TUNER operations]
Station up/down buttons.

⑥ MULTI CONTROL function buttons
Use to set and operate the MULTI CONTROL buttons, and switch the function.
TV CONTROL: Press to operate TV.

⑦ Number/Amplifier setting buttons

[When setting AMP (operations)]
STEREO: Switches the STEREO mode.
DSP MODE: Switches the DSP surround effects. The DSP MODE does not function while a Dolby Digital (AC-3) program source is being played back.
⏸ : Switches the Dolby Surround mode.
THX CINEMA: Switches the THX mode.
CH. SELECT: Selects the speaker that you want to adjust.
TEST TONE: When turned ON (while in SYSTEM SET UP mode), volume balance adjustment signals are output in turn from each of the speakers and can be adjusted.
ATT: Operates at ANALOG signal input. When turned ON when the sound is unstable due to excessive input levels, the input signal level drops so that the sound becomes easier to listen to.
SIG. SELECT: Selects an input signal in the LD, DVD function.
CH. LEVEL: Adjusts the volume level of the speaker selected with the CH. SELECT.
LIST IN: Enters the LIST input menu in the CD function.
SYS. SET UP: Enters the SYSTEM SET UP mode.

[TUNER operations]
Number buttons: Use for setting the frequency value when the station call is selected or during direct access.
CLASS: Switches the CLASS number.

[VCR operations]
TV/VCR: Switches between TV and VCR.

[CD Operations]
DISC: Use to select a DISC number.

⑧ LIST button
Displays the LIST menu when CD is selected with the INPUT SELECTOR.

⑨ FUNCTION button
Switches the function.

⑩ MULTI OPERATION button
Use to set the multi operation.

⑪ POWER button
Turns ON/OFF the power of products other than this unit.

⑫ TV buttons

⑬ AMP button
Press when using this button in amplifier setting mode.

⑭ MODE CHECK button

⑮ COMMANDER SET UP button
Use to control and learn operations of other manufacturers' products, and set multi operation functions.

⑯ SYSTEM OFF button
Use to turn OFF the power of all products connected to the main unit.

SPECIFICATIONS

Amplifier section

Continuous power output (DIN, 2 channels driven)*
  Stereo (1 kHz, T.H.D. 1 %, 6 Ω) ..... 110 W + 110 W
Continuous power output (DIN, 2 channels driven)*
  Stereo (20 Hz – 20,000 Hz, T.H.D. 0.09 %, 6 Ω) .... 100 W + 100 W
Continuous power output (DIN, 5 channels driven)
Surround
  Front ..... 100 W + 100 W (1 kHz, 1 %, 6 Ω)
  Center ..... 100 W (1 kHz, 1 %, 6 Ω)
  Rear ..... 100 W + 100 W (1 kHz, 1 %, 6 Ω)
Total Harmonic Distortion (both channels driven)*
  Stereo (20 Hz– 20,000 Hz, 6 Ω, 100 W OUTPUT) ..... 0.09 %
Dynamic Power (2 Ω/4 Ω/8 Ω) ..... 270 W/150 W/85 W

● *Above specifications are for when power supply is 230 V.*

Input (Sensitivity/Impedance)
  PHONO MM ..... 3.8 mV/47 kΩ
  CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
  DVD/TV, VIDEO ..... 275 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)
  PHONO MM ..... 100 mV
Frequency Response
  PHONO MM ..... 20 Hz to 20,000 Hz ±0.3 dB
  CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
  DVD/TV, VIDEO ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB**
Output (Level/Impedance)
  TAPE 1 REC, TAPE 2 REC, VCR 1 OUT,
  VCR 2 OUT ..... 275 mV/2.2 kΩ
Tone Control
  BASS ..... ±6 dB (100 Hz)
  TREBLE ..... ±6 dB (15 kHz)
  LOUDNESS ..... +4 dB (100 Hz)
  +2.5 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
  PHONO MM ..... 80 dB**
  CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
  DVD/TV, VIDEO ..... 97 dB**
Signal-to-Noise Ratio
[DIN (Continuous rated power output/50 mW)]
  PHONO MM ..... 70/64 dB**
  CD, TAPE 1, TAPE 2, VCR 1, VCR 2, LD/SAT, TUNER,
  DVD/TV, VIDEO ..... 90/65 dB**

* *Measured by Audio Spectrum Analyzer.*
** *DIRECT button is ON.*

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VIDEO Section (S jack)

Input (Sensitivity/Impedance)
  VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT
    Luminance signal (Y) ..... 1 Vp-p/75 Ω
    Chrominance signal (C) ..... 0.268 Vp-p/75 Ω
Output (Level/Impedance)
  VCR 1, VCR 2, MONITOR
    Luminance signal (Y) ..... 1 Vp-p/75 Ω
    Chrominance signal (C) ..... 0.268 Vp-p/75 Ω
Frequency Response
  VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT
    Luminance signal (Y) ..... 5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio
  Luminance signal (Y) ..... 55 dB
Cross Talk (3.58 MHz) ..... 55 dB

VIDEO Section (Composite)

Input (Sensitivity/Impedance)
  VCR 1, VCR 2, VIDEO, DVD/TV, LD/SAT ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
  VCR 1, VCR 2, MONITOR TV ..... 1 Vp-p/75 Ω
Frequency Response
  VCR 1, VCR 2, LD/SAT, DVD/TV,
  VIDEO → MONITOR ..... 5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

Miscellaneous

Power Requirements ..... AC 220 – 230 Volts, 50/60 Hz
Power Consumption ..... 1200 W
In Standby Condition ..... 6 W
AC OUTLETS (European model only)
  SWITCHED x 2 ..... TOTAL 100 W MAX
  SWITCHED x 1 ..... 100 W MAX
Dimensions ..... 420 (W) x 177 (H) x 449 (D) mm
Weight (without package) ..... 15.4 kg

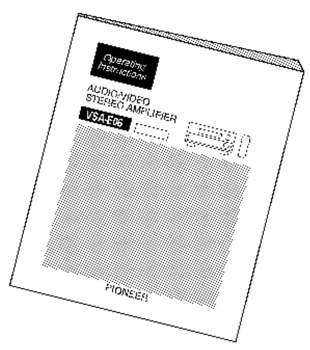
Furnished Parts

Dry cell batteries (AA/LR6, Alkaline) 2
Remote control unit 1
Operating Instructions 1

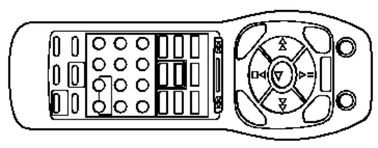
NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

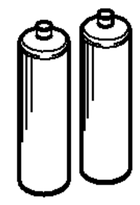
- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.



● Operating Instructions



● Remote control unit



● Alkaline dry cell batteries (AA/LR6) x 2